Exhibit B

1 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. -----: VOLUME 1 TRIAL TRANSCRIPT December 2, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 BY MR. ZEBRAK: (Continuing)
- 2 Q. Mr. Cooker, why was it that you wanted the jury to hear
- 3 some of that music today?
- 4 A. Well, I think it just is a good example of, you know,
- 5 exactly what I was talking about, that emotion, passion, that
- 6 | connection. You know, hopefully at least one of those songs
- 7 | brought you back or reminded you of something that was
- 8 important or made you feel better.
- 9 Again, it's that emotional connection. And,
- 10 obviously, these are some of the most important recordings
- 11 in -- in our company.
- 12 Q. So I would like to explore some basic music industry
- 13 terms. Could you start by explaining what is the record
- 14 industry?
- 15 A. Sure. The record industry is primarily focused on working
- 16 | with artists to create, market, and distribute their
- 17 | recordings. And, you know, to give you an example or explain
- 18 | that more clearly, you know, when you think of the biggest
- 19 | single of the year, "Old Town Road" with Lil Nas X, or you
- 20 | think about the two recent number one albums we had with Celine
- 21 Dion, or with country star Luke Combs, or you think of Elvis
- 22 Presley, it's the artists who you're thinking about, those are
- 23 | the people that we work with to market, distribute, and sell in
- 24 | the recording -- in the recording industry.
- 25 Q. And where is it within the overall music industry that the

- 1 record industry fits?
- 2 A. So again, that part is, you know, the exploitation of
- 3 | working with the performing artists. There is also the music
- 4 | composition, which is the songwriter actually writing the song.
- 5 Sometimes that is the same as the artist performing, often it
- 6 is not, there's a separate songwriter that contributes to it.
- But beyond that, you know, there are retail partners,
- 8 there are digital service providers, there are live
- 9 performances in live venues, and an entire live industry, live
- 10 music industry around that.
- In addition to, you know, thinking about studios and
- 12 recording studios and studio musicians and union employees, et
- 13 | cetera, that make up the overall music industry.
- 14 Q. So you mentioned -- I think you said digital service
- 15 provider. But could you explain what you meant by that.
- 16 A. Yeah, sorry. I fall into that habit of using acronyms.
- 17 So a digital service provider is really services that most
- 18 people think about going and either listening to music or
- 19 | watching a movie or a film.
- So, for example, Apple Music, Amazon, Spotify are
- 21 examples of digital service providers.
- 22 Q. And what is a music publisher?
- 23 A. A music publisher is a company that works with the
- 24 songwriter.
- 25 Q. And just to be clear, is there -- is a digital service

- 1 provider, or DSP, the same thing as Cox?
- 2 A. No. A digital service provider is a retail -- or a
- 3 | platform that ultimately is either selling or streaming music
- 4 to consumers.
- 5 Q. So a DSP is different than an ISP?
- 6 A. DSP is different than an ISP, exactly.
- 7 Q. This is the Washington area where we're famous for our
- 8 acronyms.
- 9 A. Sorry. So is the music industry. Sorry.
- 10 Q. And just so we have some clear terminology, what is a
- 11 music download?
- 12 A. A music download is a track or an album that has been
- downloaded for purchase from a digital store, one of those
- DSPs.
- 15 Q. And what does music streaming refer to?
- 16 A. Music streaming is when a consumer is listening to music
- 17 | via a streaming service, like Spotify or Apple Music, where
- 18 ultimately the music is -- is typically not downloaded or
- 19 purchased by the consumer, but is experienced either through
- 20 add supported or a subscription type of payment method.
- 21 Q. And what does the term "sound recording" refer to?
- 22 A. Sound recording is the recording of a composition by an
- 23 | artist or a band. You know, in that medley I played, it ended
- 24 | with Adele's "Rolling in the Deep." "Rolling in the Deep" is a
- 25 sound recording.

- 1 Q. Thank you. And you've referred to songwriters. Would you
- 2 explain what a music composition is.
- 3 A. Sure. The music composition is the lyrics and the
- 4 composition of the song that is ultimately performed by the
- 5 artist.
- 6 Q. And who generally owns music compositions?
- 7 A. Typically the publishers own music compositions.
- 8 Q. Do record companies generally own musical compositions?
- 9 A. Generally they don't.
- 10 Q. So besides the music publishers and the record companies
- 11 and the digital service providers, could you explain who some
- 12 of the other major participants are in the overall music
- 13 industry.
- 14 A. Yeah. I think, you know, back to some of the examples of,
- 15 | you know, live venues, you know, there's a live business that
- 16 | supports the music industry. You know, recording studios,
- 17 engineers, studio musicians.
- 18 Q. Okay. And I promise one last term for you to define.
- 19 A. Sure.
- 20 Q. What does the term "A&R" refer to?
- 21 A. A&R is artists and repertoire. It's the area of our
- 22 | company that focuses primarily on the creative side of the
- 23 | artist relationship.
- 24 Q. So could you expand on what you mean by A&R involves the
- 25 creative side.

- 1 A. Yeah. So royalties are the term that is used to designate
- 2 | the payment that is made from the record company to the artist.
- 3 It's usually based on a contractual relationship between the
- 4 record company and the artists. And it's usually paid as a
- 5 percentage of the revenues that are collected on behalf of that
- 6 artist.
- 7 Q. Are copyrights among the core assets of record companies?
- 8 A. Copyrights ultimately are absolutely the core asset of the
- 9 company. They are the music. They are the thing that protects
- 10 | the music, that allows us to enforce that protection, and
- 11 ultimately it is what we are monetizing and commercially
- delivering in the marketplace that generates revenue for the
- 13 | company and for the artist.
- 14 Q. What relationship, if any, is there between protection of
- 15 | copyright and the royalties that artists obtain?
- 16 A. I think they go hand in hand. If there is no protection
- of the copyright, then ultimately no one is -- there is no
- 18 remuneration, there is no payment being made, and ultimately
- 19 the artist is not able to get paid a royalty.
- 20 Q. Sure. Let's talk a little bit about how record companies
- 21 generally make money for themselves and the artists.
- 22 A. Sure.
- 23 Q. Could you explain how that has worked historically.
- 24 A. Yes. So historically, you know, all the way back to the
- 25 | '50s and '60s, you know -- and the business has gone through a

- 1 lot of change in how you actually generate revenue and make
- 2 money. But it was a 45s business. It was a singles business
- 3 on vinyl which eventually moved to LPs, eight-tracks, if any of
- 4 us remember that, to cassettes, to CDs, to digital downloads,
- 5 and now to streaming.
- And so, you know, there has been a lot of different
- 7 | ways to legally obtain music throughout the years. And that
- 8 has changed dramatically from the way that consumers actually
- 9 listen to and experience music.
- But all of those different components, even today,
- 11 other than maybe eight-tracks and cassettes, still make up, you
- 12 know, how we make money in the business, including vinyl.
- 13 Q. And you referred to downloads. How are sound recordings
- 14 available for sale as downloads in this era?
- 15 A. So they would be available in a download store, it would
- 16 be a retail environment for purchase. And they typically would
- 17 be available as individual tracks or also as albums.
- 18 Q. And for what length of time has that been the case,
- 19 roughly speaking?
- 20 A. Roughly, early 2000s. I mean, the biggest, most prominent
- 21 store that everyone recognizes is the Apple iTunes store,
- 22 download store.
- 23 Q. I would like to explore with you now some of the costs
- 24 | that record companies typically incur. Can you at a high level
- 25 list the more significant categories of those costs.

- 1 | sharers in or around 2009 because it was not very good PR?
- 2 A. I don't know if that was the motivation. I am not sure.
- 3 Q. You did participate -- I think you said in your direct
- 4 examination that you participated, part of a team, including
- 5 the general counsel, correct?
- 6 A. Yes. On the leadership team, yes.
- 7 Q. Yes. Was there any -- do you recall having any
- 8 discussions at an executive level with regard to why a decision
- 9 was made not to continue to pursue individual file sharer suits
- 10 after 2009?
- 11 A. I remember that there were conversations. And I remember
- 12 | that there were multiple reasons ultimately that played into
- 13 that.
- 14 Q. But Sony just stopped after that time; is that correct?
- 15 A. Yes, we stopped after that time.
- 16 Q. Let me take you back to the 2013 and 2014 timeframe, if
- 17 you can harken back to that.
- Were digital revenues from Sony Music, including
- 19 | revenues from streaming services, the primary revenues that you
- 20 depend on to continue in making substantial investments
- 21 required to operate a recorded music company?
- 22 A. Sorry, could you ask the question again?
- 23 Q. Sure. During the timeframe 2013 and '14, did you form a
- 24 | belief that digital revenues of -- are and would remain the
- 25 primary revenues that Sony would depend on to continue to make

- 1 substantial investments required to operate a recorded music
- 2 company?
- 3 A. Digital revenues were a major component, yes.
- 4 Q. Okay. And that included streaming services as well,
- 5 correct?
- 6 A. That did, yes.
- 7 Q. And part of it is because people just stopped buying CDs
- 8 around that time, right?
- 9 A. Well, no, I don't think people stopped buying CDs around
- 10 | that time. I think CDs have been declining in sales since
- 11 around 2000.
- 12 Q. And -- now, today the majority of the revenues for Sony
- 13 Music are through streaming, streaming activities, correct?
- 14 A. In the U.S., that's correct.
- 15 Q. And did you form a belief in and around 2014 that then in
- 16 | the last several years you believed there was an explosion in
- 17 | online streaming services?
- 18 A. I honestly don't recall exactly where my head was at in
- 19 2014.
- 20 Q. Okay. Do you recall forming a view that the streaming
- 21 | services represent the second largest component of digital
- 22 music business enabling users to access millions of songs from
- 23 | their personal computers or mobile devices without actually --
- 24 | without actually buying the music?
- 25 A. Yeah, it was very clear that we were going through a

139 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. VOLUME 2 (A.M. Portion) TRIAL TRANSCRIPT December 3, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 as part of a band as well?
- 2 A. Yes, that's correct.
- 3 Q. And tell us a little bit about that experience.
- 4 A. Well, it's a challenging art. It's a bit of magic
- 5 | involved in songwriting. It's a painful, creative expression
- 6 at times. And as painful as it was sometimes, it was also some
- 7 of the best memories I have had during that moment in time when
- 8 | I was creating work with my colleagues.
- 9 Q. So based on your own experience as a songwriter and your
- 09:22:24 10 | work at UMPG, can you tell us a little bit about the
 - 11 | songwriting process in general.
 - 12 A. Sure. As I said, it's a little bit of magic. It's kind
 - of this magical combination of notes and rhythm and melody and
 - 14 lyric that comes together in a way that creates art. It's
 - 15 audible art.
 - 16 Q. And how many songs does a songwriter typically write in a
 - 17 | year?
 - 18 A. Oh, it depends on the songwriter concerned. Some are
 - 19 | quite prolific. Some could write hundreds of songs a year.
- 09:22:58 20 | Some go through a painstaking process of perhaps producing just
 - 21 | a few noteworthy songs a year. It depends on the writer
 - 22 concerned.
 - 23 Q. So the songwriter writes the song. Who typically performs
 - 24 the song?
 - 25 A. At times the songwriter will also be the recording artist,

- 1 but much of the time the artist is different from the
- 2 | songwriter. So there are two distinct professions and two
- 3 distinct creative works. You have the song and then the sound
- 4 recording of the song.
- 5 Q. Can you provide an example where the songwriter is
- 6 different than the recording artist?
- 7 A. Certainly. There is a popular song "R-e-s-p-e-c-t"
- 8 performed by Aretha Franklin, which happened to be written by
- 9 Otis Redding.
- 09:23:47 10
- There are some songs in the case here, such as by
 - 11 Aerosmith like "Livin' on the Edge," which was written by a
 - 12 gentleman named Mark Hudson.
 - Also, Aerosmith "Rag Doll" was written by a gentleman
 - 14 named Jim Vallance.
 - There is also another song subject to this case,
 - 16 "Life is a Highway," which was performed by Rascal Flatts,
 - 17 | which was written by a gentleman named Tom Cochrane.
 - So there are lots of examples where -- including
 - 19 | songs subject to this case, where the songwriter is a distinct
- 09:24:23 20 entity or person from who is performing the song.
 - 21 Q. And "Life is a Highway," there are actually two recording
 - 22 | artists for that song; is that right?
 - 23 A. Well, multiple, actually, because it was covered several
 - 24 | times. It was originally written and performed by Tom Cochrane
 - 25 back in the maybe late '80s, early '90s, and then was covered

- 1 | multiple times by different artists, including Rascal Flatts
- 2 | more recently for the movie "Cars."
- 3 Q. Can you provide an example where the songwriter is also
- 4 the recording artist?
- 5 A. Certainly. We have many, as I said, writers who are also
- 6 the artists. Billy Joel tends to write his own material. One
- 7 of the songs subject to this case is "I Go to Extremes" by
- 8 Billy Joel both as the performer and the songwriter.
 - "Lose Yourself" by Eminem is also subject to this case. He co-wrote that song and performed it.
- I could go on if you would like.
- 12 Q. All right. Well, thank you. Let's turn now to music
- 13 | publishers and their role in the creation and development of
- 14 songs and songwriters.

9

09:25:19 10

- Mr. Kokakis, what does a music publisher do?
- 16 A. We help to manage the careers of the songwriters. We give
- 17 | them guidance in terms of their career paths. We help manage
- 18 | the creative works that they create by finding opportunities to
- 19 exploit them, by going out and collecting money generated from
- 09:25:54 20 | those works, and by protecting the rights of the songwriters.
 - 21 | Q. Can you tell us a little bit more about the creative
 - 22 | support that music publishers provide to songwriters?
 - 23 A. Certainly. Well, I'll speak to Universal and what we've
 - 24 created. We have hundreds of employees who work in the
 - 25 | creative department who do nothing but liaise on a daily basis

- 1 with the songwriters who we represent. Again, giving them
- 2 | creative support, setting up studio sessions for them,
- 3 | co-writing opportunities with other writers, discussing career
- 4 path, discussing opportunities to place their songs in film and
- 5 TV projects and commercial advertisements, things of that
- 6 nature. Anything that a songwriter needs to help create the
- 7 | art that winds up being brought to the public.
- 8 Q. And where do the record companies fit into this process?
- 9 A. Well, the record companies play a critical role in the
- 09:26:51 10 ecosystem, but a very different role. The record companies
 - 11 record the songs. They record the music that winds up being
 - 12 publicly distributed. They represent the records and the
 - 13 artists. Publishers represent the songwriters and the songs.
 - 14 Q. How do music publishers help songwriters make a living
 - 15 from their songs?
 - 16 A. Well, as I mentioned, we look for opportunities to help
 - 17 | commercially exploit the songs that are delivered to us by
 - 18 looking for licensing opportunities, by looking for artists to
 - 19 record the songs. Licensing opportunities could take the form
- 09:27:28 20 of placement in a film, placement in a TV project, in a
 - 21 commercial, embodiment on a record, use in merchandise like
 - 22 | lyric t-shirts, karaoke products, things like that.
 - 23 Q. Does that mean that a songwriter gets paid every time a
 - 24 | song is played in a bar?
 - 25 A. Yes. That is known as public performance. There are very

- 1 few exceptions for that for small, small venues. But when you
- 2 hear a song in a shopping mall, in a concert venue, in a bar or
- 3 | a restaurant, that generates a royalty payment to the
- 4 songwriter.
- 5 Q. I would now like to talk a little bit about more about
- 6 UMPG specifically. Tell us about UMPG and its business.
- 7 A. Certainly. We're one of the largest music publishers in
- 8 the world. We have offices in dozens of countries throughout
- 9 the world. We have a roster of tens of thousands of
- 09:28:27 10 | songwriters, and several millions of copyrights that we
 - 11 represent, millions of songs.
 - 12 Q. What are the different music genres in UMPG's catalog?
 - 13 A. A varied genre, based -- really we touch every genre from
 - 14 pop, to R&B, to rock, to hip hop, to classical music, country,
 - 15 everything in between, and probably sub-genres that I'm not
 - 16 even aware of that we represent.
 - 17 Q. Can you name a few songwriters that Universal Music
 - 18 Publishing Group has signed that we might recognize?
 - 19 A. Sure. The more recognizable ones would be Barry Manilow,
- 09:29:09 20 | and Billy Joel, and Bruce Springsteen, and Otis Redding,
 - 21 Brittany Spears, Christina Aguilera, Justin Bieber, Justin
 - 22 Timberlake, Steppenwolf.
 - I mean, I could spend the entire day naming the list,
 - 24 | if I could recall all of them. But it's a renowned roster of
 - 25 clients.

- So that's why we have so many different companies under the single umbrella.
- 3 Q. Thank you.

- 4 Mr. Duval, you can take that down.
- 5 I'd like to talk about UMPG's licensing activities.
- 6 What are the different types of licenses that Universal Music
- 7 Publishing Group negotiates on behalf of its songwriters?
- 8 A. Certainly. Well, I already mentioned licenses for film
- 9 and TV projects. Those are commonly known as synchronization
- 09:32:36 10 | licenses. We issue licenses for the use of lyrics, as I
 - 11 | mentioned, in merchandise or in karaoke-based product, in sheet
 - 12 music. We issue licenses for the performance of songs in, as I
 - 13 mentioned, bars, restaurants, concert venues, dance studios.
 - And more commonly, we issue what's known as a
 - 15 | mechanical license, which is for the use of a song in a sound
 - 16 recording.
 - 17 Q. And what are the different types of sound recordings that
 - 18 may fall under mechanical licensing?
 - 19 A. Well, there are different media types that sound
- 09:33:11 20 recordings can be exploited through. You could have vinyl.
 - 21 You could have -- I remember vinyl back in the day. I remember
 - 22 | cassettes. I remember 8-tracks. Those were kind of clunky.
 - More recently, we see digital downloads. And we see
 - 24 streaming now, which is the preferred or more common method of
 - 25 distribution of sound recordings on services like Spotify and

- 1 Apple and Pandora and Amazon.
- 2 Q. Why is that license called a mechanical license?
- 3 A. It's called a mechanical license because it refers to the
- 4 physical or mechanical embodiment of a song on a sound
- 5 recording. And it dates back to many decades ago where you had
- 6 mechanical piano rolls, right, the scrolls with the -- you
- 7 know, with the grooves in them. And those would sit inside of
- 8 | a piano and turn and actually play the song. They would click
- 9 the keys.
- 09:34:11 10 So that's how the phrase or name "mechanical royalty"
 - 11 | came about.
 - 12 Q. Are the licensing opportunities generated from -- like --
 - 13 | for -- by licensings for musical compositions the same as those
 - 14 | generated for sound recordings?
 - 15 A. Sometimes they're the same and oftentimes they're
 - 16 different because they're unique rights types that are
 - 17 attributable to songs that aren't attributable to sound
 - 18 recordings.
 - For instance, the public performance of a song
- 09:34:46 20 generates a royalty for the songwriter. Lyrics are unique to
 - 21 songs. Those licenses would bear a royalty for the songwriter,
 - 22 but not for the recording artist.
 - 23 So there are some distinct areas for song royalties
 - 24 | that don't overlap with sound recording royalties.
 - 25 Q. We've been talking about royalties. Can you give us a

- 1 | sense of a royalty rate for, say, downloading a song?
- 2 A. Certainly. It's prescribed by law under the Copyright
- 3 Act. And it's something that fluctuates over time. But at the
- 4 | moment, the prevailing rate is 9.1 cents per song per download.
- 5 Q. And what portion of the royalties does a songwriter get
- 6 from that royalty?
- 7 A. It depends on the underlying contract between the music
- 8 publisher and the songwriter. But generally the songwriter
- 9 will get the bulk of that money, anywhere from 90 percent down
- 09:35:47 10 to perhaps 50 percent. More commonly in the 75 percent to
 - 11 90 percent range goes to the songwriter.
 - 12 Q. So a dime per download. How is a songwriter supposed to
 - make a living off of a dime per download?
 - 14 A. Well, it's a numbers game. It's a volume game. So it's a
 - 15 | very low margin, low cost transaction that over time adds up.
 - 16 It's a pennies business, even a micro pennies business these
 - 17 days.
 - So one of the responsibilities that we're charged
 - 19 | with as the music publisher in representing a songwriter is to
- 09:36:23 20 go out and collect all the micro pennies. And, you know, if
 - 21 | all goes well, that adds up to something that a songwriter can
 - 22 make a living from.
 - 23 Q. I'd now like to -- now that we have this background, I'd
 - 24 now like to turn to the UMPG musical compositions that are at
 - 25 issue in this case. Are you familiar with them?

- 1 | strategies for how to enforce the rights of our songwriters and
- 2 to reach out to people in those instances to try to put
- 3 licenses in place or find commercial solutions or, as a last
- 4 | resort, to litigate when we're essentially ignored or can't
- 5 come to terms with the party who has infringed.
- 6 Q. And from that work, do you think that peer-to-peer piracy
- 7 | was a problem for Universal Music Publishing Group in the years
- 8 | 2013 and 2014?
- 9 A. Undoubtedly. It was a problem for the entire music
- 09:41:23 10 | industry. And, yes, Universal felt pain during that time, as
 - 11 did all of our clients.
 - 12 Q. Why was it a problem?
 - 13 A. It was a problem because you, essentially, had platforms
 - 14 | that allowed for the consumption of music without there being
 - 15 any payment for that. It's like I just had the lovely
 - 16 experience of going to WalMart on Black Friday, and if people
 - 17 | can envision what that experience is like, imagine if
 - 18 everything was actually free and you could just run through the
 - 19 store, you know, and take whatever you want.
- 09:41:58 20 That's what a peer-to-peer file sharing environment
 - 21 | is like. It's the Wild West. It's a complete free-for-all
 - 22 | where people's property is just stolen at will.
 - 23 Q. And are there particular challenges associated with
 - 24 peer-to-peer piracy versus other types of piracy?
 - 25 A. Well, yes, there's some unique aspects to it in that you

- 1 | can't identify much of the time, most of the time who is
- 2 | actually engaging in the activity, meaning who's stealing the
- 3 property. There are millions of those individuals involved or
- 4 | entities involved. So it's untenable to go after everybody.
- 5 You just can't enforce your rights that way.
- 6 So the anonymity of it and the just sheer volume of
- 7 | it makes it very difficult to manage our rights, to enforce our
- 8 rights.
- 9 Q. Has Universal Music Publishing Group ever tried to
- 09:42:59 10 | calculate its harm or losses from peer-to-peer piracy?
 - 11 A. You know, I've been asked that in different contexts.
 - 12 And, you know, the example I give is that if the house is on
 - 13 | fire, you don't stop to measure the temperature that the flame
 - 14 is burning at. You put the fire out, and you know it's doing
 - damage.
 - 16 And that's kind of what this is. It's very difficult
 - 17 to quantify because, again, there's anonymity. You don't know
 - 18 what the volume of activity is going on behind the scenes. But
 - 19 some things are self-evident. And this is one of those things.
- 09:43:34 20 If you have property available for free or goods available for
 - 21 free, you know people are stealing them, you can't quite tell
 - 22 how many, but it's clearly doing damage.
 - 23 So in direct response, no, we haven't run specific
 - 24 analyses of this, but we don't have to to know that there's
 - 25 damage being done.

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197
        1
            decline in physical --
        2
                      MS. NOYOLA: Objection, Your Honor.
        3
                      THE COURT: Overruled.
        4
            BY MR. BUCHANAN: (Continuing)
        5
                 It says: As the decline in physical sales was offset by
            the growth in digital and other revenues with subscription and
        6
        7
            streaming revenues increasing by approximately 75 percent over
        8
            the prior year, for the first time in 2013 yearly digital sales
        9
            exceeded physical sales.
                      That's true, is it not?
10:28:01 10
       11
                 I believe that's accurate, yes.
       12
                      THE COURT: What year are you referring to?
       13
                      MR. BUCHANAN: 2013, 2013.
       14
                      THE COURT: Thank you.
       15
            BY MR. BUCHANAN: (Continuing)
       16
                 I would like you to turn to the next tab.
       17
            Α.
                Tab 4?
       18
               Yes. And page 24. Do you see that?
       19
                      And it has columns 2014, 2013. It has revenue.
                                                                        Do
10:28:35 20
            you see that?
       21
                Yes, I see that.
            Α.
       22
                 Okay. And is it correct that for the year 2014 from music
       23
            publishing, the revenue went from 655 million for the prior
       24
            year to 673 million just for the UMPG?
       25
               Yes, I see that.
            Α.
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- 1 Q. And that was an increase of 4 percent?
- 2 A. Yes.
- 3 Q. Okay. And this had to do with streaming, a lot of
- 4 streaming happening, replacing the old type of digital sales or
- 5 CD sales?
- 6 A. That's accurate, yes.
- 7 Q. Now, you said you weren't sure of the worth of Universal
- 8 Music Group. Could you turn to tab 5.
- 9 Are you familiar with "Rolling Stone Magazine"?
- 10:29:25 10 A. I am, yes.
 - 11 Q. Okay. I assume you read that. I know you have a great
 - 12 interest in music.
 - 13 A. No, I don't.
 - 14 Q. Okay. So it reports here, and tell me if this is wrong,
 - 15 maybe it refreshes your recollection, that UMG is worth 33.25
 - 16 billion?
 - 17 A. "Rolling Stone" is not an authority on the valuation of
 - 18 corporations.
 - 19 Q. So if you read that, it says: On Monday Deutsche Bank
- 10:29:59 20 | said in a report that it believes UMG is worth --
 - 21 THE COURT: Stop. Sustained. The objection is
 - 22 | sustained. You can ask him whether his recollection is
 - 23 | refreshed by the number, but you're, again, testifying into the
 - record on an exhibit which is not in evidence and hasn't been a
 - 25 foundation laid.

- 1 A. That's when I transitioned.
- 2 Q. Are there UMG companies that are plaintiffs in this case?
- 3 A. There are two. UMG Recordings, Inc., and Capital Records,
- 4 LLC.
- 5 Q. And what kind of companies are those?
- 6 A. Those are what we traditionally call record companies that
- 7 | make, market, sell, get to consumers records, recorded music.
- 8 Q. And what is the distinction -- or can you explain the
- 9 distinction between UMG Recordings and UMPG, or Universal Music
- 11:20:04 10 Publishing Group?
 - 11 A. So the Publishing Group owns, markets musical
 - 12 | compositions, the songs themselves that are written by
 - 13 songwriters.
 - 14 The record company side, UMG Recordings, Inc.,
 - 15 Capital Records, LLC, owns, markets the recorded music, the
 - 16 music you hear on the radio.
 - So Lennon and McCartney wrote the Beatles songs.
 - 18 Their compositions might be owned and controlled by a
 - 19 publishing company, which is actually not a Universal company,
- 11:20:38 20 | it's a Sony company. We own and control the Beatles
 - 21 recordings, the performances you hear that are embodied on
 - 22 records.
 - 23 Q. Are UMG Recordings and UMPG ultimately owned by the same
 - 24 entity?
 - 25 A. Ultimately they are owned by a parent company.

- 1 Q. And what is that parent company?
- 2 A. The ultimate parent is called Vivendi SA.
- 3 Q. And does that parent company own -- strike that.
- What entities does Vivendi SA own, that you know?
- 5 A. They operate a number of businesses. They operate a -- or
- 6 | they own a large advertising agency called Havas. A movie
- 7 | studio called Canal+. I think they have some video game
- 8 | companies. I'm not familiar with their full portfolio.
- 9 Q. As between UMG Recordings and UMPG, can you describe how
- 11:21:50 10 they are structured in terms of employees and operations?
 - 11 A. They operate separate businesses. There is a CEO of the
 - 12 publishing company, and it has its own legal department and
 - 13 artists, A&R department, or artists and repertoire department.
 - 14 It has its own facilities.
 - The record company side of the business operates
 - 16 quite a number of different record labels that each have their
 - 17 own CEO and marketing people and promotion people and
 - 18 | salespeople. And that rolls up into a parent recorded music
 - 19 company.
- 11:22:27 20 Q. I am sorry, I didn't mean to interrupt you.
 - 21 Can you describe several of the record labels that
 - 22 UMG owns.
 - 23 A. Well, it now owns EMI, which is Capital Records. It owns
 - 24 Interscope, Decca, Verve, Republic. I mean, it owns many, many
 - 25 record companies.

- 1 unauthorized copying, distribution, exploitation of the
- 2 recordings that we own and what we market and what our business
- 3 is founded on.
- 4 Q. And are there different types of piracy?
- 5 A. There are different types. There have historically been
- 6 different types. There was a time where piracy consisted of
- 7 | vinyl bootlegs of recordings. There was a time where cassette
- 8 piracy, people copying albums on cassettes and selling them was
- 9 the problem.
- 11:30:39 10 And then as with the development of the Internet,
 - 11 Internet piracy grew as a huge problem.
 - 12 Q. And are you familiar with -- when you say "Internet
 - 13 | piracy, " can you describe several of the types of Internet
 - 14 piracy you're familiar with.
 - 15 A. Well, there's Internet piracy where someone might just put
 - 16 | up a website and be offering copies to directly download. And
 - 17 | there's Internet piracy like we're talking about in this case,
 - 18 where there are peer-to-peer systems.
 - 19 Q. And are peer-to-peer systems -- how do peer-to -- how does
- 11:31:14 20 | peer-to-peer piracy differ from the older types of piracy that
 - 21 you use to deal with, say, for instance, vinyl or cassettes
 - 22 | that you were describing?
 - 23 A. Well, in those cases someone needed to make copies of our
 - 24 recordings and get them one-to-one out to somebody who wanted
 - 25 to acquire a pirated copy.

- 1 Q. Let me interrupt you. When you say "one-to-one," what do
- 2 you mean by that?
- 3 A. Well, like a copy would be made in a factory or somewhere
- 4 and it had to get into someone's hand. With Internet piracy,
- 5 peer-to-peer piracy, unlimited copies can be generated and
- 6 distributed across the Internet.
- 7 Q. Can you describe, at a consumer level, how peer-to-peer
- 8 piracy works?
- 9 A. So if -- well, at a user level, someone might have a copy
- of the recording on their computer, on their hard drive, as
 - 11 | well as software that allows them to connect into a
 - 12 | peer-to-peer system. And it allows them to distribute a copy
 - of that recording to anyone else who has that peer-to-peer
 - 14 software client installed and connected to that system.
 - So that user can upload it into a system where
 - 16 millions of people can have illegal access to the recording.
 - 17 Q. When -- strike that.
 - I think you said earlier that the business of UMG is
 - 19 to sell recordings; is that right?
- 11:32:52 20 A. Yeah, to sell, distribute, license, market recordings.
 - 21 Q. When UMG sells recordings through a service like iTunes or
 - 22 Amazon, what rights does UMG give the consumer to distribute
 - 23 | the recordings on a peer-to-peer service?
 - 24 A. The consumer gets no rights to do that.
 - 25 Q. Why not?

399 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. VOLUME 3 (A.M. Portion) TRIAL TRANSCRIPT December 4, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 Was that correct?
- 2 A. That is correct.
- 3 Q. Which specific peer-to-peer networks was MarkMonitor
- 4 trying to detect the sharing of music files on?
- 5 A. There are four particular networks that MarkMonitor was
- 6 monitoring. Those are BitTorrent, Ares, eDonkey, and
- 7 | Gnutella, G-n-u-t-e-l-l-a.
- 8 Q. Thank you.
- 9 And in the course of your work in this matter, did
- 10 | you have the opportunity to review the MarkMonitor system that
- 11 | was used to detect the sharing of these music files and report
- 12 | that to Cox?
- 13 A. Yes, I did.
- 14 O. And at a high level, what did your review consist of?
- 15 A. I reviewed the source code for those systems, that is to
- 16 say, the human readable form of their computer programs. I
- 17 also had the opportunity to interview MarkMonitor engineers,
- 18 and I was provided some documents that gave me some background
- 19 about the systems in anticipation of those reviews.
- 20 I also reviewed evidence that is produced or
- 21 | collected by those systems, that is to say, the
- 22 | contemporaneous records that those systems generate as they go
- 23 about their business.
- 24 Q. And is that a complete recitation of everything you've
- 25 looked at, or is that just a summary?

- 1 A. That's just a summary. There was a lot of material. You
- 2 know, I've also seen deposition transcripts from some of --
- 3 and declarations from some of the MarkMonitor personnel and
- 4 other personnel who were involved in software used in these
- 5 systems.
- 6 Q. And you mentioned, I believe you said you spoke with
- 7 MarkMonitor engineering employees. Was that correct?
- 8 A. Yes, with some of their engineers.
- 9 Q. Did you speak with anyone else at MarkMonitor?
- 10 A. There were two specific individuals, Sam Bahun and a
- 11 | gentleman whose last name I'm sure I will mangle with a
- 12 Russian last name.
- 13 Q. That's okay. And, I'm sorry, I know you mentioned source
- 14 | code and you gave a bit of a short description of what that
- 15 | is, but could you please give the jury a little more of an
- 16 understanding of what source code is?
- 17 A. Sure. When programmers write a program, they do so in a
- 18 | computer language that's designed specifically to facilitate
- 19 giving that instruction to the computer, and it's an
- 20 | artificial language, but it has a syntax and verbs and nouns
- 21 | you create and data structures, and you write out the
- 22 | instructions that the computer is to perform. Those then get
- 23 translated into the form that the computer actually uses.
- 24 Q. And are you familiar with the name Audible Magic?
- 25 A. I am.

- 1 Q. And did you come to any conclusions about the Audible
- 2 | Magic system? Just a yes or no question.
- 3 A. Yes, yes.
- 4 Q. And are you prepared to discuss those today?
- 5 A. I am.
- 6 Q. Thank you.
- 7 And did you come to conclusions with respect to the
- 8 overall MarkMonitor system?
- 9 A. Yes, I did.
- 10 Q. And are you prepared to discuss those today?
- 11 A. Yes, I am.
- 12 Q. At a high level, what was your conclusions about the
- 13 MarkMonitor system, including the Audible Magic system used as
- 14 part of it?
- 15 A. Based on the evidence I've reviewed and examined, it's my
- 16 opinion that that system both accurately detects acts of
- 17 | copying and distribution on the internet on these peer-to-peer
- 18 | systems, and it also provides and produces accurate notices
- 19 | that can be sent to an ISP like Cox to notify them of that
- 20 activity.
- 21 Q. Thank you.
- Ms. Frederiksen-Cross, were you in the courtroom on
- 23 | Monday for the parties' opening statements?
- 24 A. I was, Counsel.
- 25 Q. And did you hear Cox's counsel argue that, in very stark

- 1 Q. And is there a common technique upon which these
- 2 peer-to-peer file sharing systems each rely?
- 3 A. Well, they have several common characteristics.
- 4 Obviously, they're all designed to operate on the internet, so
- 5 they all rely on internet connections to be able to carry out
- 6 | the distribution. They also all rely very heavily on a
- 7 | technique called hashing for file identification and for
- 8 authentication of content.
- 9 0. Could you elaborate on what hashing is?
- 10 A. Yeah. I think if we go to the next slide, I'd like to
- 11 introduce an icon here that I'll be using throughout too.
- 12 This little fingerprint icon is going to be used when I talk
- 13 about hashing, just to help to remind you about that, but
- 14 hashing is a technique -- or a hash is a technique that was
- developed by the U.S. government. It's based on a specific
- 16 | calculation of the file's contents, and it uniquely identifies
- 17 | what a file's contents are.
- So if you have a hash that you have gotten from one
- 19 | file and you see that hash again, you know that the file --
- 20 | the second file with that same hash has got the same contents.
- 21 Q. And if you could turn your attention back to the image on
- 22 | this, on this slide, it looks like there's a fingerprint with
- 23 | a little icon in the lower right. What is that depicting?
- 24 A. This is the hash that represents a particular file. So I
- 25 have combined the fingerprint, because sometimes these are

- 1 0 percent, and others might have some other number of pieces.
- 2 Q. Okay. So in this example, does the empty -- the user
- 3 | connected through Cox, is the idea that that user doesn't have
- 4 anything at that point?
- 5 A. That's right.
- 6 Q. Okay. Okay. And then so what happens when the user has
- 7 | the software on their computer and opens up a torrent file?
- 8 A. The computer -- the user's computer will go out and do
- 9 what's called a handshake with each of these peers on this
- 10 | forum so that, you know, do you have this file?
- 11 Yeah, I have this file.
- 12 And then they will begin exchanging pieces of the
- 13 file.
- 14 So if you could click here and watch the -- watch
- 15 what happens in the box on the computer. You see that as it
- 16 | collects those pieces, it very quickly is able to collect and
- 17 | assemble all of the pieces, and at the same time, the peers on
- 18 the other side are also exchanging pieces with each other so
- 19 | that they can all build complete copies of that file as well.
- 20 Q. And then what happens?
- 21 A. Well, once the, the, all of the pieces are collected, the
- 22 | torrent file allows them to be reassembled in the proper
- 23 sequence so that the music can be played by the user.
- 24 Q. And does the user have to do anything to put those pieces
- 25 together?

- 1 A. No, no. That all happens automatically, just like the
- distribution. You know, as soon as a user computer gets a
- 3 piece, it can be sharing that piece with others, and as soon
- 4 as it gets all the pieces, a little icon pops up that that
- 5 | song is fully assembled, and you can play it now.
- 6 Q. And I see a reference on the slide to a peer swarm. What
- 7 does that refer to?
- 8 A. Well, this -- there's only so much room on a slide. You
- 9 know, I showed four peers here. A typical swarm is larger
- 10 than that, and the actual number of computers that might be
- 11 trading in a particular piece of music at a particular time
- 12 can be in the tens of thousands.
- 13 Q. I see. And you -- this slide depicts -- now it depicts
- 14 more computers.
- 15 A. A few more joined the swarm.
- 16 Q. And do you have an understanding about the number of
- 17 users that are on the BitTorrent network?
- 18 A. The most recent reputable study I found was by IEEE, and
- 19 | it's a few years old. It indicates that at any one point in
- 20 | time, there'll be between maybe 15 and 27 million peers
- 21 exchanging content on the internet, and it's -- that's at any
- 22 one point in time.
- 23 | O. Is there an official place one can go to see exact
- 24 | measurements of how many users there are on the BitTorrent
- 25 network?

- 1 A. No, there is not.
- Q. And why is that?
- 3 A. Well, the communication for any of these computers -- any
- 4 of the peers is between the peers, and some of these
- 5 | peer-to-peer systems use a tracker, so if you were to put a
- 6 test tracker up with the right monitoring stuff, you could see
- 7 | the transactions maybe that were going to that tracker, but
- 8 you still couldn't see everything else that was going on in
- 9 the network.
- 10 Q. So, so there's nowhere you can go to see the number of
- 11 | users on the network overall; is that correct?
- 12 A. That's correct. By design, these systems are extremely
- 13 | robust and these machines talk directly to each other without
- 14 | central control.
- 15 O. What about if I went to the Cox user that downloaded and
- 16 is then distributing files to others? Could I uncover the
- 17 | number of times that Cox user distributed files from a review?
- 18 A. Not in any practical way, no.
- 19 Q. What do you mean by that?
- 20 A. Well, if you just went to a user's computer and inspected
- 21 | it forensically, you might have some evidence of their
- 22 | activity, but you would not have evidence of all of their
- 23 activity.
- 24 Q. Let me ask you --
- 25 A. And you would, you would have to actually do a forensic

- 1 examination of that machine to get any information.
- 2 Q. Let me ask it to you this way: Are logs kept with --
- 3 | from the software otherwise of the number of times that user
- 4 distributes a file?
- 5 A. No.
- 6 Q. Okay. Can you explain a little bit about the other three
- 7 | peer-to-peer networks that were identified in MarkMonitor's
- 8 infringement notices to Cox?
- 9 A. Sure. Can we go on to the next slide?
- 10 Q. Okay. And so these are the other three? Is that the
- 11 Ares logo?
- 12 A. Yes, Ares, Gnutella, and eDonkey.
- 13 | O. Okay. And I see again the, the file hash value image
- 14 | we're using. Why is that there?
- 15 A. Again, all of these systems rely on hash to authenticate
- 16 and identify files. That's a really important technology.
- 17 That's one of the foundation technologies of these systems.
- 18 Q. And there's a bunch of icons under file types. What is
- 19 | that meant to convey?
- 20 A. Again, these networks can be used to distribute any kind
- 21 of file. Anything that's in an electronic form can be
- 22 | transmitted on BitTorrent, so electronic books, movies, music,
- 23 | if I want to send a video of my dog chasing her tail, any of
- 24 | that can be distributed on the -- using BitTorrent across the
- 25 internet to others.

- 1 Q. Sure. And why is there the internet cloud on this, this
- 2 | slide?
- 3 A. They all rely on the internet for connection to each
- 4 other, for the peers to be able to connect to each other and
- 5 to be able to search for music, to download music, and to
- 6 distribute copies of music.
- 7 Q. What, what happens if, if the peer that's downloading and
- 8 distributing the music file is disconnected from the internet?
- 9 | Can they still engage in that, that activity at that moment?
- 10 A. No. When a peer is disconnected from the internet, it
- 11 can neither send nor receive files from any other computer on
- 12 | the -- across the internet.
- 13 Q. And did you when you were listening to Cox's counsel's
- 14 opening statement see a box saying Cox has no control over the
- 15 infringement?
- 16 A. I remember seeing that, yes.
- 17 Q. And, and what's your reaction to that?
- 18 A. I disagree, and I disagree for two reasons. One is that
- 19 | Cox is the only party who can take an internet -- an IP
- 20 address and determine what customer was using that internet
- 21 address at that point in time, so they're the only ones who
- 22 | can actually forward that notice to an actual customer who
- 23 might be able to affect the behavior.
- MR. BRODY: Your Honor, I have an objection.
- THE COURT: What's your objection?

- 1 Q. So, Ms. Frederiksen-Cross, could these networks function
- 2 | without hash values being reliable?
- 3 A. No.
- 4 Q. And before we had that sidebar, what, what happens with
- 5 respect to the user that's downloading or distributing if
- 6 | their internet access is taken away?
- 7 A. Then they can't download and distribute.
- 8 Q. Let's, let's shift gears for a moment and -- or actually
- 9 not for a moment. Let's shift gears and talk about your
- 10 review of the MarkMonitor system, okay?
- 11 A. Okay.
- 12 Q. So you said MarkMonitor's role was to detect infringement
- 13 of -- and report it to Cox, correct?
- 14 A. That's correct. Cox and other subscribers, but -- or
- other ISPs, but in this case, Cox is the focus.
- 16 Q. Okay. And at a high level, would you describe what your
- 17 | review of the MarkMonitor system consisted of?
- 18 A. Sure. I reviewed the MarkMonitor source code. I
- 19 | reviewed evidence produced by the MarkMonitor system. I
- 20 reviewed sound recordings that corresponded to the hashes of
- 21 | infringing content. I reviewed samples of the notices that
- 22 MarkMonitor sent out and records about how many notices it had
- 23 | sent out, and I also reviewed records that provided -- that
- 24 | were drawn from MarkMonitor's records that provided
- 25 information about both the songs and the Audible Magic

- 1 | verification associated with those songs, so song files and
- 2 Audible Magic verifications.
- 3 Q. And you -- did you speak with anybody at MarkMonitor?
- 4 A. I did have the opportunity, as I mentioned, to discuss
- 5 the operation of the MarkMonitor system with two MarkMonitor
- 6 employees, and I also had the opportunity to read their
- 7 depositions and/or declarations and some of the other
- 8 information that was made available to me about the system.
- 9 | Q. Okay. Let's jump in in more detail to that MarkMonitor
- 10 | system. What, what are the components of that system?
- 11 A. If we could go to the next slide, I have the three
- 12 principal components listed.
- 13 Q. Okay. What's the first component?
- 14 A. The verification module.
- 15 Q. And what is that?
- 16 A. The verification module is used to identify -- or to
- 17 | create a database of known infringing works, and so there's
- 18 | really two parts to that. One is downloading works, and then
- 19 | the other is confirming their content, so you know that a
- 20 particular hash is associated with a file that is known to
- 21 | contain some of plaintiffs' -- you know, either one of
- 22 | plaintiffs' files or in some cases multiples of plaintiff's
- 23 files.
- 24 Q. Sure. So you mentioned downloading the file. Where is
- 25 | it downloaded from?

- 1 | it was able to find a match, what's the artist and title and
- 2 album that that unknown fingerprint matched to.
- 3 Q. Okay. And then -- and this -- if you go back to the
- 4 prior slide, once Audible Magic returns a match, is that then
- 5 what gets populated in MarkMonitor's database of known
- 6 infringing files?
- 7 A. Right. MarkMonitor updates its database to reflect that
- 8 for the information that it collected when it downloaded that
- 9 | file to reflect that now it's been matched --
- 10 Q. Okay.
- 11 A. -- and here's who it is.
- 12 Q. And that's the verification process?
- 13 A. That's the verification process on the MarkMonitor side,
- 14 yes.
- 15 Q. Excuse me, the verification module, right?
- 16 A. Yes.
- 17 Q. Okay. And could you explain what the collection module
- 18 is, generally speaking?
- 19 A. Yeah. If we can go forward back to the slide we left
- 20 off?
- 21 The collection module is the part that actually goes
- 22 out to peers on these peer-to-peer networks and identifies
- 23 whether or not those peers are copying and distributing the
- 24 file.
- 25 Q. Okay. And I see two hands have -- doing a handshake in

- 1 | the middle there. What is that depicting?
- 2 A. Well, for BitTorrent, that's actually what it's called, a
- 3 handshake, but it's -- for instance, if I'm on a machine -- on
- 4 | a computer and I'm interacting with a swarm of peers, I make a
- 5 handshake with each computer in that swarm where I say this is
- 6 what I'm looking for, and they can respond back whether they
- 7 have it and how much they have and which pieces they have, and
- 8 so that's, that's what that handshake represents.
- 9 0. So --
- 10 A. It's the beginning of the download process really, but no
- 11 | content has actually been -- no actual music content has been
- 12 transferred yet.
- 13 Q. So what's the significance of a handshake being between
- 14 | the MarkMonitor computer and the Cox user computer here in
- 15 | this slide?
- 16 A. Well, again, the MarkMonitor collection agent behaves
- 17 | exactly like any other peer except that it's creating these
- 18 evidentiary records with respect to reaching out to peers,
- 19 | making a handshake with the peers, getting information about
- 20 | what the peers have. So the, the MarkMonitor collection agent
- 21 is shaking hands with a Cox peer in this, in this slide.
- 22 Q. And in this slide, could you just -- so it says -- walk
- 23 | us through what's happening in the left bubble off of
- 24 MarkMonitor, please.
- 25 A. Okay. So once the MarkMonitor system connects to that

- 1 | specific peer, that's essentially the commencement of a
- 2 download process, and so certain information is exchanged back
- 3 and forth between the MarkMonitor system and a peer at that
- 4 time, and the purpose of this exchange of information is to
- 5 verify that the peer is online, actively running a BitTorrent
- 6 | client or one of the other clients that we've discussed,
- 7 | actively responding to requests for a particular hash value
- 8 that has been verified to have known content that is some of
- 9 plaintiffs' copyrighted works.
- 10 And then, you know, because this is, is using the
- 11 hash which is what the BitTorrent system itself uses, at that
- 12 point, instead of downloading content, it breaks off the
- 13 | connection because there's no need to -- the peer has already
- 14 | said, yes, I have the hash, I have these pieces of the hash.
- 15 So at that point, the system breaks the connection and creates
- 16 | an evidentiary record that's -- that records that exchange of
- 17 | communication.
- 18 Q. What -- it says: Hash match (no need to re-download).
- 19 Why is that on your slide?
- 20 A. Just to remind me to point out, A, that it doesn't
- 21 | actually download the file, it doesn't create another copy of
- 22 | the file, but it has used that hash, that is, the fingerprint
- 23 of the file, just as any BitTorrent client would, to say this
- 24 is the file.
- Yes, I've -- and the peer is responding, yes, I have

- 1 | that file or I have pieces of that file.
- 2 Q. And when you say re-download it, is that because in the
- 3 | -- one step earlier in the verification module, MarkMonitor
- 4 | already downloaded a file that has that hash?
- 5 A. That's correct, yes. It's a known hash here, so there's
- 6 no need to download it.
- 7 THE COURT: Can we stop here for our morning break?
- 8 Does that work?
- 9 MR. ZEBRAK: Of course, Your Honor.
- 10 THE COURT: All right.
- MR. ZEBRAK: We don't have that much more.
- 12 THE COURT: Okay. Then let's take 15 minutes.
- 13 We'll come back and continue the testimony. Thank you.
- 14 You're excused.
- NOTE: At this point, the jury leaves the courtroom;
- 16 whereupon, the case continues as follows:
- 17 JURY OUT
- 18 THE COURT: All right. Anything before we break?
- 19 MR. ZEBRAK: No, Your Honor.
- 20 THE COURT: Okay. All right. Let's take 15 minutes
- 21 then. We're in recess.
- 22 NOTE: At this point, a recess is taken; at the
- 23 | conclusion of which the case continues in the absence of the
- 24 jury as follows:
- 25 JURY OUT

- 1 and notified Cox, how that worked with regard to the actual
- 2 e-mail?
- 3 A. Sure. The MarkMonitor system reads the data. It
- 4 prepares the e-mail. That e-mail then gets sent to the ISP,
- 5 in this case Cox. It does that by looking up the IP address
- 6 and saying, oh, this is the ISP that administers that
- 7 particular IP address.
- And the e-mail addresses that I show here on the
- 9 | left, antipiracy2@riaa.com, is where -- is the sender identity
- 10 | in that e-mail, and abuse@cox.net is the recipient, and that
- 11 is an e-mail address that Cox publishes to the world. It's
- 12 | that if you have a complaint about, for instance, copyright,
- 13 | this is who you're supposed to e-mail to.
- 14 Q. Sure. And could you explain to the jury what you have on
- 15 | the right side of this slide?
- 16 A. Yeah. I think I alluded a moment ago that there are some
- 17 other tests that are made before a notice is sent out in order
- 18 to ensure the currency of the notice and to send the most
- 19 relevant notices.
- 20 So the file has been verified as infringing before
- 21 | the detection process, the evidence collection process ever
- 22 | can be used to send a notice. So if a file hasn't been
- 23 | confirmed to contain infringing content, that, that evidence
- 24 package is not eligible to send a notice.
- 25 Then the, the system also tests -- remember I said

- 1 that the size information gets used later. The system looks
- 2 at the size of the file and the size that's passed back from
- 3 | the peer, and if the file isn't at least 90 percent complete,
- 4 | if the peer is not advertising that it has at least 90 percent
- of the file to share, then no notice is sent.
- 6 Also, just to make sure that the information is
- 7 | current enough that Cox and ultimately hopefully the recipient
- 8 | will take action upon it, it only produces notices if the
- 9 actual detection occurred within the last 48 hours of when the
- 10 | e-mail preparing notice ran. So it doesn't send notices on
- 11 things that are months old. It has to be within the last 48
- 12 hours.
- And then finally, if the IP address that was
- 14 | captured during the interaction with the peer can't be looked
- 15 up for some reason to figure out who the ISP is, then
- 16 | obviously no notice would be sent because you don't know who
- 17 to send it to. So Cox only gets the notices that are related
- 18 to Cox customers, and other ISPs would get the notices related
- 19 to their customers.
- 20 Q. And is this slide a complete depiction of every nuance of
- 21 | the notification process?
- 22 A. No. There are other, other checks and requirements that
- 23 the system goes through as well in order to, to ensure
- 24 accuracy and the appropriateness of the, the message that's
- 25 being sent, but I think these are probably the most important

- 1 ones.
- Q. And where does the information come from that MarkMonitor
- 3 | includes in the infringement notice that goes to Cox reporting
- 4 a Cox subscriber for infringement?
- 5 A. The vast majority of it comes originally from the peer
- 6 and then from the evidence files where that was stored after
- 7 | the interaction with the peer.
- 8 Q. And could you explain to the jury in a little more detail
- 9 what key information is included in the infringement notice
- 10 from your perspective?
- 11 A. Yeah. The -- I mean, a lot of the really important
- 12 things for the ISP to be able to process this notice or for
- 13 the consumer who receives it, assuming it's forwarded, to be
- 14 | able to understand it and how it relates to their computer
- 15 | system is you have to have -- the notice identifies the ISP
- 16 based on the IP and port address, and that's also reflected,
- 17 | the IP and the port address are also contained in the notice.
- 18 Who the ISP is, of course, is a part of the notice because
- 19 it's who the e-mail is sent to.
- The infringing file by name and by the file hash
- 21 | that was detected, so if it's a torrent hash or the other --
- 22 one of the things I didn't mention about the other
- 23 | peer-to-peers is at this point in time that's relevant for the
- 24 litigation, they were exchanging whole files, so it would be
- 25 the hash associated with that file.

- 1 A sample track infringe -- so -- and by sample
- 2 track, I mean if the torrent was an entire album that maybe
- 3 | had ten tracks on it, it wouldn't list all ten of them. It
- 4 | would just list a sample, you know, this is one of the tracks
- 5 from that torrent to help the recipient of that notice
- 6 understand what music was causing the problem, and the date
- 7 and time of detection both so that the recipient in the notice
- 8 can understand it, but also because Cox needs the date and
- 9 | time to be able to figure out who the consumer is, because
- 10 | MarkMonitor doesn't have records about who Cox's customers
- 11 | are. That's the part that Cox has to be able to supply in
- 12 order to forward the notice.
- 13 Q. And did I hear you correctly earlier that you reviewed
- 14 some of the actual notices that MarkMonitor sent to Cox?
- 15 A. Yes, I did.
- 16 Q. And did you also say that you looked at a larger set of
- 17 data about sort of the whole complete set of notices that
- 18 MarkMonitor sent to Cox?
- 19 A. That's correct. There were approximately a quarter
- 20 million notices in the, in the set.
- 21 Q. And do you have any understanding about whether
- 22 | MarkMonitor is able to detect the entirety of the unauthorized
- 23 reproduction and distribution of, you know, the list of works
- 24 | that the RIAA asked it to find on peer-to-peer networks?
- 25 A. That's not technically feasible to be able to capture

484 1 down. 2 MR. ZEBRAK: Sure. Let me --THE COURT: Thank you. Go ahead. 3 4 BY MR. ZEBRAK: 5 Well, let me rephrase the question as Your Honor 6 suggested. 7 When MarkMonitor identifies a peer, a Cox subscriber 8 on one of these file sharing networks with a file on their 9 computer, is MarkMonitor able to identify whether that's a 10 copy of a file that the peer obtained lawfully? 11 MR. BRODY: Objection, Your Honor. 12 MR. ZEBRAK: I could say it differently, Your Honor. 13 THE COURT: Yeah. Sustained. 14 MR. ZEBRAK: Sure. 15 BY MR. ZEBRAK: 16 When MarkMonitor identifies a peer, a Cox subscriber on a 17 network with a file, can it tell if the peer obtained it from 18 another peer on the network as opposed to a legitimate source 19 like iTunes or Amazon or something like that? 20 Well, in the evidence I examined, it was often the case 21 that the -- I mean, in approximately, I think, 15 percent of 22 the records, the peer was still collecting the evidence. 23 they only had part of the file, you know, 90 percent but not 24 100 percent. So that certainly tells me that in those 25 instances, that peer was not getting it off of Amazon.

- And with respect to the, you know, the implication
- 2 | that all of these peers might have gotten something legally
- 3 and then gone out there and created torrents for it
- 4 presumably -- because if they got it legally, they wouldn't
- 5 have a torrent -- it's kind of like saying you walk into a bar
- 6 and there's a guy there with a beer in his hand. Where did he
- 7 get it? Well, he probably bought it in the bar.
- 8 Is it possible that one of those guys or two of
- 9 those guys were the ones who first created a torrent? As a
- 10 hypothetical, that could be possible, but it's improbable.
- MR. BRODY: Your Honor, I object. That's
- 12 speculation.
- THE COURT: Hold on, hold on. No, overruled. I'm
- 14 going to allow her to use the example. Go ahead.
- THE WITNESS: I'm just saying it would be extremely
- 16 | improbable to think that that could happen on such a massive
- 17 | scale, that somehow all of these people bought something and
- 18 | then created torrents for it so they could give it away to
- 19 | total strangers en masse. That's just a nonsensical
- 20 interpretation of the evidence.
- 21 BY MR. ZEBRAK:
- 22 Q. And even -- let's take -- call that a nonsensical
- 23 | interpretation of the evidence, that somebody would -- well,
- 24 let me not --
- 25 A. And I didn't mean any disrespect by that, but it just --

- 1 opinion, via the other three products.
- I just don't think that, that there is any lack of
- 3 proof that the Cox clients were participating in these file
- 4 | sharing networks and were providing content that based on its
- 5 hash identification is plaintiffs' content.
- 6 Q. Sure. And for those Cox subscribers that were reported
- 7 | in these notices that hadn't yet obtained 100 percent of the
- 8 file, I think you said there were about 15 percent of them
- 9 that had somewhere between 90 to 100 percent of the file; is
- 10 | that correct?
- 11 A. Yes.
- 12 Q. What were -- what's your understanding, if any, of what
- 13 those peers were engaged in at that time of detection?
- 14 A. Well, I'm sure that they were probably distributing as
- 15 | well as copying, but for at least some of them, when I went
- 16 | through the evidence records, I could see that over time, the
- 17 amount of the file that they had moved from less than 100
- 18 percent when it was detected on one detection to later moving
- 19 to 100 percent of the file. So I know for a fact that they
- 20 were downloading copies.
- 21 Q. Sure.
- 22 A. And because of the tit-for-tat way that BitTorrent works,
- 23 | it's almost impossible to conceive that they were not also
- 24 uploading those copies to others.
- 25 Q. What do you mean by the tit-for-tat way of BitTorrent?

- 1 A. BitTorrent and the other three protocols that we
- 2 discussed earlier are all designed to prioritize exchanges
- 3 | with peers that are, are downloading to you. So if I have ten
- 4 | peers asking me for content, I'm going to give content -- I'm
- 5 going to download from and give content to those four peers or
- 6 three peers that are giving me the best content exchange
- 7 possible. So I'm uploading as well as downloading.
- 8 And if you're not also uploading, the tit-for-tat
- 9 system kind of puts you at the back of the line, and although
- 10 | it's still possible to get content if you're not uploading,
- 11 | it's not the way these systems are designed to work, it's not
- 12 | the way the protocols are designed to work. All of them have
- 13 built into them this notion of exchange, that it's two peers
- 14 exchanging content.
- 15 Q. Thank you. I'd like to turn your attention now to the
- 16 Cox CATS system, okay?
- 17 A. Okay.
- 18 Q. You said you had an opportunity to review the CATS system
- 19 | in your work in this case?
- 20 A. Yes, I have.
- 21 Q. Okay. And at a high level, what did your review involve?
- 22 A. It involved, again, looking at the source code of the Cox
- 23 | CATS system, some of the configuration data related to how
- 24 | that system was set up to operate. I looked at copies of some
- 25 of the policies that the CATS system was intended to implement

538 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. -----: VOLUME 3 (P.M. Portion) TRIAL TRANSCRIPT December 4, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 A. Over the course of that time, it's in the millions.
- 2 Q. And have you ever had occasion to see Audible Magic
- 3 | misidentify a recording?
- 4 A. No, never a single one misidentified.
- 5 Q. So what happens after you get a confirmation that a file
- 6 is infringing?
- 7 A. So once it's confirmed that it's infringing, then we move
- 8 on to the third step in this diagram here where we collect
- 9 evidence.
- 16:50:21 10 And what's involved there is we actually connect --
 - 11 | we establish a full connection with every peer who is involved
 - 12 | in the swarm to collect that evidence about the file that
 - 13 they've distributing.
 - 14 Q. And where do you collect that evidence to?
 - 15 A. Into our system, yeah.
 - 16 Q. And what is the process of collecting the evidence? Can
 - 17 | you describe that.
 - 18 A. Sure. So after the file has been verified as infringing
 - 19 and we're monitoring the swarm, we see peers, in some cases
- 16:51:02 20 peers that are already actively distributing the swarm. Our
 - 21 | system will sit and monitor that so we can see as new peers
 - 22 enter.
 - 23 And as new peers are discovered, our system will
 - 24 establish a full connection with that peer. That connection
 - 25 allows us to kind of communicate back and forth through the

- 1 specified process that the peer-to-peer network has
- 2 established.
- 3 Each of those communication steps are logged in the
- 4 evidence that we store for that instance of infringement.
- 5 Q. If you don't connect to a peer, can you see what a peer on
- 6 | the swarm is doing?
- 7 A. Can you clarify? Sorry.
- 8 Q. I think you testified that when a peer comes into the
- 9 swarm, you connect to them, and so you can exchange
- 16:52:01 10 | information. Are you able to see what one peer is doing with
 - 11 | another peer if you're not connected to them?
 - 12 A. No.
 - 13 Q. And why is that?
 - 14 A. It's the design of the protocols. So we can have full
 - 15 | visibility into what the peer is doing if we are connected
 - 16 directly to them, but we don't have visibility of their
 - 17 | communication with other peers.
 - 18 Q. And what is it that -- the process of connecting to the
 - 19 peer that you engage in, what is that called?
- 16:52:36 20 A. Oftentimes we call it the handshake.
 - 21 Q. And what is the handshake?
 - 22 A. So it's essentially a process, you can think of it as a
 - 23 digital handshake where there's an exchange of certain messages
 - 24 from our side and from the other peer's side, and kind of that
 - 25 mutual exchange of messages is what we refer to as the

handshake.

- And part of those messages, there's some key data
 that's exchanged. The peer confirms to us what file. Based on
- 4 | the unique file identifier, it's called a hash. They give us
- 5 that hash. They also tell us how much of the file they have
- 6 and are distributing in the swarm.
- 7 Q. Does MarkMonitor actually download the infringing file
- 8 from that peer?
- 9 A. No. At that point, it's not necessary.
- 16:53:34 10 Q. Why not?
 - 11 A. Well, we've already downloaded the file in its entirety
 - 12 | when we initially found it. So we know what the file is, and
 - 13 | we have the unique file identifier that guarantees what that
 - 14 file is. It's unique to that specific file.
 - And so, when we communicate with the peer, they tell
 - 16 | us what they have, which confirms the file, and they tell us
 - 17 | what they're distributing. So there's no need to go further
 - 18 | than that when they've confirmed it.
 - 19 Q. Okay. So what happens after MarkMonitor collects
- 16:54:11 20 information about a peer's distribution and stores it?
 - 21 A. So after we collect that information, the collection of
 - 22 | all of that data is packaged up and certain elements of the
 - 23 data are then inserted into what we call a notice. You can
 - 24 think of it as an e-mail.
 - We put that information into the notice, and then the

- 1 any. But the majority of the ones we were unable to produce
- 2 | were from 2012.
- 3 Q. Can we, please, look at PX-17. Publish that, please.
- It may be -- unless you recognize it from this, I
- 5 | will ask Mr. Duval to open one of these folders.
- 6 Do you recognize this directory?
- 7 A. Yeah, if you could open one --
- 8 Q. Open one of the folders?
- 9 A. Yeah.
- 17:26:24 10 Q. And maybe open one of those.
 - 11 A. Yes. Okay. Yes, I recognize it.
 - 12 O. What is this exhibit?
 - 13 A. So these are copies of all of the notices -- excuse me,
 - 14 | all of the notices that were sent to Cox Communications.
 - 15 Q. And do you know roughly the time frame for the notices
 - 16 | that were sent in this directory?
 - 17 A. Yes. I believe it -- excuse me, I believe it was January
 - 18 of 2012 through March of 2015.
 - 19 Q. And I want to look at just one of these notices, please.
- 17:27:08 20 And we have one up. Great. Can we zoom in on just the top
 - 21 piece there that says -- above: Begin PGP sign message.
 - Can you just describe what this portion of the notice
 - 23 | is.
 - 24 A. Yeah, I'm sorry. You said the top section here?
 - 25 Q. Yeah, just the top section.

- 1 A. So the -- yeah. The way we store these, the top section
- 2 | that kind of is above the: Begin PGP sign message where the
- 3 dashes are, is actually the message header. So this is just --
- 4 | we store the information about the message when it was sent.
- 5 So --
- 6 Q. And then below that, the -- with: Dear sir.
- 7 A. Yeah, so that's --
- 8 Q. Sir or madam. Sorry.
- 9 A. Yeah, that portion is what we call the body of the notice.
- 17:28:02 10 | It's the actual e-mail that was sent to Cox.
 - 11 Q. And who would have drafted that language?
 - 12 A. This would have been an approved notice template that we
 - 13 got from the RIAA.
 - 14 Q. Okay. And can we just scroll down a little, please.
 - So this is the notice that would have gone to Cox?
 - 16 A. Yes.
 - 17 Q. Okay. Keep scrolling, please. Okay.
 - And can you go to the bottom part of the notice,
 - 19 please.
- 17:28:36 20 All right. From List of Infringing Content down, do
 - 21 you see that? Can you describe what that is, please.
 - 22 A. Yes. In between kind of the rows of dashes there, that's
 - 23 | where we list out the infringement or the infringing content
 - 24 that we identified related to this specific notice.
 - 25 Q. So it says: Infringing work, "No Love." What is that?

- 1 A. That would be the -- or infringing work -- "No Love" is
- 2 | the name of the song in this case.
- 3 Q. Okay. And what is File Name?
- 4 A. The file name is the actual name of the file that we found
- 5 on the peer-to-peer network.
- 6 Q. Okay. And what is First Found and Last Found? What does
- 7 | that mean, excuse me?
- 8 A. The first found and last found are specific timestamps --
- 9 previously in the logs, I think it was called initiated and
- 17:29:39 10 | completed. But these are essentially start and stop time
 - 11 periods of when we saw the peer distributing in this particular
 - 12 infringement.
 - 13 It's meant to give the ISP a marker so that they can
 - 14 | use it to look up the subscriber that was using this IP during
 - 15 that window of time.
 - 16 Q. All right. I think we know what File Size is.
 - What is the IP Address?
 - 18 A. So this is the IP address. And just below it the port
 - 19 | specific to the peer that we observed infringing here.
- 17:30:12 20 O. And the network in this case?
 - 21 A. Gnutella.
 - 22 Q. So the information contained within this, where does that
 - 23 come from?
 - 24 A. This comes directly from the log files that we went
 - 25 through. So this is the -- essentially the infringement

807 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. VOLUME 4 (P.M. Portion) TRIAL TRANSCRIPT December 5, 2019 Before: Liam O'Grady, USDC Judge And a Jury

subscribers.

- 2 The pie chart depicts that -- those numbers expressed
- 3 as percents. So 95 percent of the subscribers were
- 4 residential, and 5 percent were business.
- 5 Q. And, Dr. McCabe, what is the source of the data records
- 6 you used to assess the breakdown of the Cox subscribers who
- 7 | were the subject of MarkMonitor's notices?
- 8 A. Could we go back to the slide that has the datasets on it?
- 9 Q. Sure. That would be -- please let me know when I'm there.
- 10 A. Yeah, that's fine. So it's along the top. So it's Cox
- 11 data, and it's the third file, which is -- in this display is
- 12 | called billing information. So billing information is the
- 13 | connector for the defining residential versus business.
- 14 Q. I'm going to, if it's okay, bring us back to the slide we
- 15 | were just on. Is there anything else about this slide that --
- 16 A. I think that's it. 95 percent versus 5 percent, yeah.
- 17 Q. Okay. And would you please explain to the jury what's
- 18 being depicted in this slide with respect to your repeat
- 19 offender analysis?
- 20 A. Yes. So here I looked at the -- excuse me -- I looked at
- 21 | the, the source of the, of the notice. So the notices that I
- 22 | have recorded from, as infringers -- I'm sorry -- the notices
- 23 | from going back to MarkMonitor, for those rights holders, my
- 24 understanding is they're the plaintiffs in this suit, but the
- 25 Cox file also contains notices from other rights holders.

- 1 So basically here what I did was look again at
- 2 subscribers, so it's a subscriber analysis, and
- 3 | 17,729 subscribers had notices from other rights holders.
- 4 So, again, 17,729 out of 57,600, that's depicted in
- 5 the pie chart as 30.8 percent. So 30.8 percent of the
- 6 subscribers had notices from other rights holders.
- 7 Q. So out of the 57,600 Cox subscribers reported in
- 8 MarkMonitor's notices, a little less than a third of them were
- 9 also the subject of notices that led to tickets as reported by
- 10 | the rights holders? Is that what you're saying?
- 11 A. That's correct.
- 12 Q. Okay. And is this also based on Cox's records, the ticket
- data that you described earlier?
- 14 A. That's correct.
- 15 Q. Okay. Looking at the next slide you have here, would you
- 16 explain to the jury what the purpose of this slide is?
- 17 A. Yeah. The purpose is to depict the analysis that I did
- 18 | related to claims -- or notices, sorry, notices before the
- 19 | claim period. So if you look at the timeline on the bottom in
- 20 | yellow there, the bar with arrows at the end, that's the
- 21 definition of a claim period, February 1, 2013, to November 26,
- 22 | 2014, with a caveat that there's a different start time for the
- 23 one plaintiff.
- Superimposed on that in the gray is the time frame
- 25 for the Cox ticket data. So for the Cox ticket data, that

924 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. VOLUME 5 (A.M. Portion) TRIAL TRANSCRIPT December 6, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 limitation, services provided through WiFi, service or
- 2 | services. Use of any of the services shall at all times be
- 3 | subject to the terms and conditions of this AUP.
- 4 Q. And then it goes on to say that -- strike that.
- 5 Those first sentences say that this AUP applied to
- 6 | all Cox Business customers, correct?
- 7 A. For the Internet-related services.
- 8 Q. For Internet-related service, not for necessarily
- 9 telephone, right, or television --
- 10 A. Right.
- 11 Q. -- or other services? But for Internet, it applied to all
- 12 of Cox's business customers, right?
- 13 A. Yes.
- 14 Q. And then the next sentence says: This AUP is incorporated
- 15 into any applicable agreement between Cox Business and the
- 16 | customer -- excuse me -- that states the AUP applies, including
- 17 | without limitation, any applicable commercial services
- 18 agreement and retail or wholesale master services agreement;
- 19 | correct?
- 11:42:21 20 A. Yes.
 - 21 Q. And so, this is saying that this is -- this applied even
 - 22 if there is another agreement that Cox might have with that
 - 23 | customer, Cox Business may have with that customer, right?
 - 24 A. Yeah, typically there was a customer service agreement
 - 25 that incorporated this document by reference.

- 1 Q. And the next paragraph says that if there's a conflict
- 2 between those two contracts, this AUP trumps, or is in charge,
- 3 or applies, right?
- 4 A. Yes, it says the terms of this AUP will govern.
- 5 Q. Govern. And by saying "will govern," that if there's a
- 6 conflict between a specific agreement and the AUP, the AUP is
- 7 | what the customer has to follow, correct?
- 8 A. Yes.
- 9 Q. Okay. Now, in section A-1, that's much like the
- 11:43:09 10 residential AUP, it prohibits the customer from doing anything
 - 11 | that would -- on the Internet service that would violate
 - 12 | federal law, correct?
 - 13 A. Yes.
 - 14 Q. And as before, federal law included copyright
 - 15 infringement, correct?
 - 16 A. Yes.
 - 17 Q. And then it goes on at the last sentence of that paragraph
 - 18 to say, that the customer also could not use the service in a
 - 19 manner that infringes on copyright, among other things,
- 11:43:39 20 correct?
 - 21 A. Yes.
 - 22 Q. So again, just like the residential agreement, Cox
 - 23 Business customers were not allowed to commit copyright
 - 24 infringement on Cox's high-speed Internet service, in two
 - 25 different places it's prohibited, correct?

- 1 A. You mean residential and business? Is that what you mean
- 2 by "two different places"?
- 3 Q. No.
- 4 A. Oh.
- 5 Q. In two different provisions of this agreement --
- 6 A. Oh, I see.
- 7 | Q. -- say, you're not allowed to use Cox's Internet service
- 8 to commit copyright infringement?
- 9 A. Yes.
- 11:44:11 10 Q. In section 5 on the next page it says, well, any reference
 - 11 | in this agreement to customer shall also apply to any end user
 - 12 of the service, correct?
 - 13 A. Yes.
 - 14 Q. So, for example, if I run an apartment building, and I am
 - 15 | the customer of Cox, and I've got residents in the apartment
 - 16 building who are end users, those end users are subject to this
 - 17 AUP, correct?
 - 18 A. Yes.
 - 19 Q. And it goes on to say that if the customer allows others
- 11:44:51 20 to use the service, the customer is responsible for ensuring
 - 21 | that the end users comply with the AUP, right?
 - 22 A. Yeah, typically via contract.
 - 23 Q. Right. So going back to my example, I then, if I'm
 - 24 managing the apartment building, would have to make sure that
 - 25 the residents comply with the AUP, right?

- 1 A. Yeah. You'd probably put it in your lease.
- 2 Q. Maybe that's how I'd it, right. And then it goes on and
- 3 says: Customer is responsible for ensuring that all accounts,
- 4 | sub-accounts, and alternative account names associated with
- 5 | customer's principal account comply with the AUP, right?
- 6 A. That's what it says.
- 7 Q. Now, let's turn to section six of this document, please.
- 8 And that's a section called Resale and Redistribution Services,
- 9 | correct?
- 11:45:54 10 A. Yes.
 - 11 Q. So this applies in situations where Cox's customer maybe
 - 12 | is running their own small ISP, correct?
 - 13 A. It could be an ISP, yes.
 - 14 Q. Right. So I might be located in -- I don't know, pick a
 - 15 | small town somewhere, and I want to run an ISP in that town, I
 - 16 may enter into an agreement with Cox, Cox provides me with the
 - 17 | ability to then sell to others in the town, right? That would
 - 18 be the situation?
 - 19 A. That's one possible situation, yes.
- 11:46:33 20 Q. Among many situations, right?
 - 21 A. Right.
 - 22 Q. Okay.
 - 23 A. Yeah, it lists a number of them in here in this paragraph.
 - 24 There's a lot of options.
 - 25 Q. And the first paragraph of this, it says -- let's --

- 1 | actually, let me skip down to -- skip down to row (vi), or
- 2 romanette (vi).
- 3 Could you read that, please.
- 4 A. Customer is responsible for ensuring that all end users of
- 5 the services agree to the terms and conditions of this AUP as
- 6 may be amended from time to time.
- 7 Q. Okay. So this is, again, just like what we were reading
- 8 before, that the customer is responsible for end users, where I
- 9 use my apartment building as an example, this is saying the
- 11:47:32 10 | same thing applies with respect to a reseller of Cox's
 - 11 | services, right?
 - 12 A. Yes.
 - 13 Q. And then it goes on and it says in the next parentheses,
 - 14 romanette (vii): If customer becomes aware of violation of the
 - 15 AUP by any of its end users, customer shall suspend the
 - 16 | services to such end users and shall notify Cox Business in
 - 17 | writing as soon as reasonably practicable, right?
 - 18 A. That's what it says.
 - 19 Q. So the first time that a customer becomes aware that one
- 11:48:23 20 of its end users is violating the AUP, that customer must
 - 21 suspend the end user, right?
 - 22 A. Well, that's what it says.
 - 23 Q. And it uses the word "shall," right?
 - 24 A. Yes.
 - 25 Q. It's not discretionary, right?

- 1 A. I mean, that's what it says.
- 2 Q. There's no graduated response here, right? It's, you get
- 3 | caught once, you suspend?
- 4 A. Yeah. I don't know if the customer had their own
- 5 graduated response process or procedure. I'm just going by
- 6 what the document says.
- 7 Q. According to Cox, that customer was not allowed to have a
- 8 graduated response, correct?
- 9 A. Okay. Yeah, I -- no, I don't know that.
- 11:49:04 10 Q. Well, isn't that what this provision says when it says
 - 11 | that the customer shall suspend services to the end user?
 - MR. ELKIN: Objection.
 - 13 THE COURT: Overruled.
 - Do you have an understanding from reviewing the words
 - 15 | themselves? You may respond.
 - 16 THE WITNESS: Yeah, I'm --
 - 17 THE COURT: If you don't understand --
 - 18 THE WITNESS: Right. I'm not sure.
 - 19 BY MR. OPPENHEIM: (Continuing)
- 11:49:27 20 Q. So you were involved with the abuse group for a year as
 - 21 | their legal counsel, and you were also responsible for the
 - 22 | business AUP, and you're testifying that you don't understand
 - 23 | what the legal obligations were you were imposing on the Cox
 - 24 Business customers? Is that your testimony?
 - 25 A. So I know what it says, but I never actually had occasion

1009 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. -----: VOLUME 5 (P.M. Portion) TRIAL TRANSCRIPT December 6, 2019 Before: Liam O'Grady, USDC Judge And a Jury

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1110
        1
                      MR. BUCHANAN: Got it.
        2
                      MR. OPPENHEIM: Tab 13.
                      MR. BUCHANAN: Show it to him?
        3
        4
                      MR. GOULD: No.
        5
                      THE COURT: He is impeaching him, not trying to
            refresh his recollection.
        6
            BY MR. GOULD: (Continuing)
               Mr. Vredenburg, in your sworn -- that was in December
        8
            2015 --
        9
                      THE COURT: Just ask him what question he was asked
16:49:04 10
       11
            and what his answer was.
       12
            BY MR. GOULD: (Continuing)
       13
            Q. Were you asked this question and did you give this answer,
       14
            Mr. Vredenburg: And when you started -- excuse me -- all
       15
            right. So when you started in 2004, you were a 2.0 TOC; is
       16
            that correct?
       17
                      When I started in 2004, I was 2.0 tech.
       18
                      And when you started, there was a three-strike policy
       19
            for copyright infringement notices and the customer was
16:49:28 20
            terminated; is that correct?
       2.1
                      As far as I know, yes, there was a three-strike.
       22
                      Are you changing your testimony, sir?
       23
                 No, I am not changing. There was never an actual
       24
            three-strike policy.
       25
                And you recall over time Cox's graduated response was
            Q.
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1138 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. -----: VOLUME 6 (A.M. Portion) TRIAL TRANSCRIPT December 9, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 So brings back a lot of good memories.
- 2 Q. And how -- what do these sound recordings represent to
- 3 Warner Music Group?
- 4 A. They're some of the most iconic songs in our catalog and,
- 5 you know, we want to make sure they're protected.
- 6 Q. Have you listened to any of the infringing music files in
- 7 | this case?
- 8 A. I have.
- 9 Q. How many?
- 10:18:19 10 A. I listened to 100.
 - 11 Q. And how were those 100 selected?
 - 12 A. It was a random statistical sample.
 - 13 Q. And why did you listen to a sample of the infringing music
 - 14 files in this case?
 - 15 A. I wanted to make sure that I familiarized myself with what
 - 16 | was being infringed and whether they were in fact our songs.
 - 17 Q. And what did you conclude after listening to those files?
 - 18 A. That they are in fact our songs listed within the exhibit.
 - 19 Q. All right. Let's turn to the revenues generated from
- 10:18:55 20 | Warner Music's -- Warner Music Group's sound recordings.
 - 21 What are the different ways that Warner Music makes
 - 22 money from its sound recordings?
 - 23 A. We will sell our music in various formats to customers.
 - 24 And we will also license music into sound tracks, into
 - 25 commercials, films.

We will license them to competitors in some cases to put together compilations and other works.

It will also lead to what we call artist services and expanded rights. So those are other ancillary rights that we might have in concert promotion, in merchandise, and some other areas like that.

- Q. You mentioned formats. What are the different types of formats that Warner Music Group sells with sound recordings?
- A. Sure. We sell records in a physical format, so that would be either a compact disc or a vinyl record. They may also come in a box set. We sell it in digital formats, downloads, and streaming. We also sell it in mobile formats, ring back tones.

13 Those are the primary formats that we sell music in.

Q. What is Warner Music Group's view on paying its artists?

We see it as fundamental to our business. Our initial

- relationship is with the artist. We have to build the trust that they know that we're going to help them develop their
- careers and that they know that they will be -- they will be
- 19 paid for the sales that we do on their behalf and our behalf.
- Q. How would you react if someone said that the Warner Music

 Group record labels are not collection agents for their
 - 22 artists, but that they actually just collect money for
 - 23 themselves?

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- 24 A. I would say they're misinformed and patently wrong.
- 25 Fundamental to how and why we've been in business for the

- 1 decades that we've been in business and, you know, our
- 2 | competitors in some cases longer than that, if we didn't have
- 3 | the trust of our artists that they were going to get paid, then
- 4 | we wouldn't be able to continue to sign and develop and attract
- 5 | artists year in and year out.
- 6 Q. In your role as executive vice-president and chief
- 7 | financial officer, are you familiar with peer-to-peer piracy?
- 8 A. I am.
 - Q. Has Warner Music Group been impacted by peer-to-peer
- 10:22:01 10 piracy?
 - 11 A. We have.
 - 12 Q. What has been that impact?
 - 13 A. It has been -- it's been enormous and significant. In a
 - 14 period of time when music consumption has risen year in and
 - 15 | year out, as an industry we've seen revenues decline over that
 - 16 period, over a period of time from its peak to where we are
 - 17 today.
 - 18 Q. What were the consequences of this revenue decline to the
 - 19 music industry as a whole?
- 10:22:46 20 A. Well, first and foremost, you know, artists were not
 - 21 getting paid. Copyright holders weren't getting paid, as well
 - 22 as union members, as well the musicians working on those
 - 23 records.
 - We, as Warner Music Group, had to rationalize our
 - 25 infrastructure or the labels that we had, and we've had to go

- 1 through at different points in time and either close labels
- 2 down, merge them together.
- 3 Probably the clearest example I could give you would
- 4 be two of our kind of founding labels of Atlantic and Elektra
- 5 being merged together to rationalize their costs simply because
- 6 of the revenue decline.
- 7 You know, Elektra is the home of artists like "The
- 8 Doors" and "The Eagles" and "Anita Baker" and others like that.
- 9 So we also had to lay off people just in terms of looking at
- 10:23:57 10 | what our revenue base could afford and what we wanted to return
 - 11 to our owners.
 - 12 Q. I'd like to hand up the witness a copy of an exhibit
 - 13 | that's been premarked as PX 486. Thank you.
 - Mr. Flott, have you seen this document before?
 - 15 A. I have.
 - 16 Q. And at a high level, what is this document?
 - 17 A. It reflects the revenues of the U.S. recorded music
 - 18 business over a period of time.
 - 19 Q. Where does this document come from?
- 10:24:39 20 A. It comes from the RIAA, which is our U.S. industry
 - 21 association.
 - 22 Q. And how is it that you come across this type of document?
 - 23 A. It is regularly published, and it's a document that I look
 - 24 at on a regular basis.
 - 25 With the RIAA, we do a regularly quarterly call where

1 we go through performance. It's also on their Web site as 2 well. 3 MS. NOYOLA: I'd like to move PX 486 into evidence. 4 THE COURT: Any objection? 5 MR. BUCHANAN: No, Your Honor. THE COURT: It's received. 6 BY MS. NOYOLA: (Continuing) 8 Mr. Flott, can you describe what this chart shows. 9 This chart is reflecting the U.S. recorded music revenues. If I look at the left most column, that's marked as the year 10:25:28 10 11 2000 where industry revenues were in excess of \$14 billion. 12 It continues to the right to 2014 where the revenues 13 are just under \$7 billion. 14 And is this chart specific to Warner Music Group? 15 No, it's the U.S. recorded music revenues. 16 Tell us what these different colors on this chart show. 17 Each color represents a different format. So the largest 18 color that you see on the left side of the page being orange, 19 that's the compact disc. 10:26:15 20 And as you move to the right, you'll see other 21 formats as they came into play. So in 2004, you start to see 22 purple. That is the -- that's a download, and the different 23 shades are the different forms of whether it was a single or an 24 album. 25 And then we start to see in 2005 green start to come

- 1 in. And that is streaming and the different types of streaming
- 2 revenues that come through.
- 3 Q. Are you familiar with the term "music consumption"?
- 4 A. Yes, I am.
- 5 Q. What does that term mean?
- 6 A. Music consumption means the number of hours that a
- 7 | consumer is -- generally commits to listening to music.
- 8 Q. And in your day-to-day work, have you become familiar with
- 9 | the volume of music consumption over this time frame of 2000 to
- 10:27:19 10 2014?
 - 11 A. Yes.
 - 12 | O. And how so?
 - 13 A. In additional reports that either I've seen come from the
 - 14 RIAA or other published articles, there's reference made to the
 - 15 | number of hours that a consumer, you know, has committed and
 - 16 | how it's grown from 2000 through to today.
 - 17 Q. What is your understanding of the volume of music
 - 18 | consumption from 2000 to 2014?
 - 19 A. It has continued to increase year over year, and I think
- 10:27:58 20 towards the end of this chart, I believe consumers are
 - 21 | committing almost a week a year -- a week a -- sorry. A day a
 - 22 | week to consuming music.
 - 23 O. So how does that trend of music consumption compare to the
 - 24 | trend that's shown here about -- on recorded music revenues?
 - 25 A. Well, in a normal business model, you would expect -- as

- 1 | consumption grows, you would expect revenues to grow in line
- 2 | with it. There may be some shifts as things go, but generally
- 3 | the trend that we've seen with other formats as they've come in
- 4 | is that you've seen revenue growth, not revenue decline.
- 5 Q. So how do you explain the revenue decrease over this time
- 6 period if music consumption is increasing over the same time
- 7 period?
- 8 A. At this same point in time where we made the turn of the
- 9 century is really when peer-to-peer piracy was starting to grow
- 10:29:04 10 at just increasing rates. And peer-to-peer piracy, by its
 - 11 | nature, is not a sale. It's actually -- it's stealing music.
 - 12 None of those tracks that are being shared peer-to-peer are
 - 13 being paid for.
 - And as a byproduct, artists, copyright holders,
 - 15 union, and the rest of the people within the music industry
 - 16 | aren't being paid for those illegal transactions.
 - 17 | Q. And has Warner Music Group ever tried to calculate its
 - 18 | harm from peer-to-peer piracy?
 - 19 A. We've not, other than on a macro -- you know, a macro
- 10:29:54 20 basis.
 - 21 Q. And why haven't you calculated -- why haven't you been
 - 22 | able to calculate Warner Music Group's harm?
 - 23 A. The nature of peer-to-peer piracy is it's viral, and
 - 24 probably maybe the best way I can try and explain how viral it
 - 25 | works is if we use an example of a pebble going into a pond and

- 1 | it's starting to create ripples. It's not about the first
- 2 transaction or the first infringement that takes place. Once
- 3 | that track gets put up on a site that can be shared, it's then
- 4 | shared amongst, you know, whoever wants to take it and whoever
- 5 then they share it with and they share it with.
- 6 So if you kind of think about that initial pebble
- 7 | coming in, and then the next person taking it and their pebble
- 8 dropping in, it creates just these multiple waves. So the
- 9 | viral nature of it, just trying to understand where that wave
- 10:31:05 10 stops is -- has not been -- it's not something that we've been
 - 11 able to do.
 - 12 Q. When users illegally download and distribute works on
 - 13 these peer-to-peer networks, how do record companies get paid?
 - 14 A. We don't because they're stolen and they don't -- they're
 - 15 not paying anyone.
 - 16 O. And how did --
 - 17 A. Including our artists, including our copyright holders,
 - 18 | including, you know, all of the other people within the chains,
 - 19 the union musicians, the marketing people, and, you know, the
- 10:31:40 20 artists themselves. You know, ultimately no one is getting
 - 21 paid from those transactions.
 - MS. NOYOLA: Thank you, Mr. Flott.
 - Pass the witness.
 - 24 THE COURT: Cross-examination.
 - MR. BUCHANAN: Yes, Your Honor.

- 1 Q. And 1999 was the advent of Napster; is that correct?
- 2 A. In that area, yes.
- 3 Q. Okay. And in 2001 you had iTunes and Apple?
- 4 A. No, it -- iTunes started late 2003, early 2004.
- 5 Q. Okay. And that led to what they call the disaggregation
- 6 of the album, the CD album, correct?
- 7 A. It created a different format.
- 8 Q. Right. And the format was you could now pick and choose
- 9 | whatever individual song you wanted, you didn't have to go buy
- 11:23:01 10 | a CD with 26 songs that cost 25 bucks; isn't that right?
 - 11 A. If a consumer chose to do that, yes, but they still had
 - 12 | the ability to buy music in whichever way that they wanted to.
 - 13 Q. Right. But they could make a choice between going on to
 - 14 | iTunes and paying a dollar for their favorite song versus going
 - 15 to a record store and paying \$25 for an album that had 25 songs
 - 16 and really only wanted one, right?
 - 17 A. That is -- was their option, yes.
 - 18 Q. So one of the other things that, as I understand it, that
 - 19 your company did to counter the loss of CD sales due to piracy
- 11:23:42 20 and downloading was to sign artists up to what they call
 - 21 | 360 deals; is that right?
 - 22 A. That's correct.
 - 23 Q. And they involved basically trying to find artists at the
 - 24 | beginning of their career and then expanding the rights that
 - 25 your company would own vis-à-vis that artist, right?

- 1 revenue, but it wasn't our main strong point in looking at
- 2 that.
- 3 Q. Mr. Zabek, isn't it in fact true that you, in this
- 4 declaration in 2015, testified that when you implemented the
- 5 graduated response procedure, you would keep in mind the effect
- 6 on Cox's business, including the potential loss of revenue?
- 7 A. We would keep that in mind. We would keep it in mind.
- 8 Q. And you understood that when their rights were infringed,
- 9 that that was a violation of federal law, right?
- 12:19:56 10 A. If -- I think if we could prove that, possibly with a due
 - 11 process, to look through their computers. But again, we've got
 - 12 good faith on one side, we've got good faith on the other side
 - 13 | with the customer also, too.
 - When we would assist these customers, you know, we
 - 15 try to help them to see, are they using these products, you
 - 16 know, legitimately? Are they using it nefariously? Are they
 - 17 | even aware of any of the issue also -- any of these issues.
 - 18 Q. I'm handing you what's been marked as Plaintiff's
 - 19 Exhibit 260, which is an e-mail exchange between you and
- 12:20:33 20 | Terran, T-e-r-r-a-n, Williams in August of 2010. And this
 - 21 document is Bates labeled Cox Sony 00005212.
 - Mr. Zabek, in your e-mail exchange with Ms. Williams,
 - 23 | didn't you in fact say at the bottom of your e-mail:
 - 24 99 percent of DMCA violations is from people using peer-to-peer
 - 25 on purpose and not Trojan activity; correct?

- 1 A. Back then, yes, I did state that.
- 2 Q. And yet you also understood that Cox didn't want to lose
- 3 | customers over copyright violations, correct?
- 4 A. Well, Cox didn't want to lose customers over almost
- 5 anything that we could help to avoid it if there was something
- 6 that we could assist that customer with. I don't know a
- 7 | business that does want -- that wants to lose customers. And,
- 8 | no, we did not want to lose customers.
- 9 Q. What were the factors that the abuse department would consider in deciding whether or not to terminate a customer?
 - 11 A. There are many. I can't -- it's been so long. Um, to
 - 12 give you those. A lot of things we would look at would be, you
 - 13 know, was -- did the customer have any violations for, again,
 - 14 malware. You know, any kind of proxy. Could we assist them,
 - 15 | you know. Was there -- was there any software on the computer
 - 16 that they may not have been aware of that maybe somebody else
 - 17 put on there. Or, again, if they were enacted by a hacker and
 - 18 being used to actually transport that data through them also,
 - 19 too.
- So we would look at many different -- several
 - 21 different factors on there too. We'd also interview, of
 - 22 | course, the customer also, too, on that.
 - 23 Q. You just described -- I asked you --
 - 24 A. Yeah.
 - 25 Q. -- what were the factors that the abuse department would

1293 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. VOLUME 6 (P.M. Portion) TRIAL TRANSCRIPT December 9, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 | 123,000, 109,000? Do you see that?
- 2 A. Yes.
- 3 Q. And you see that as the months continue, that the deleted
- 4 notices actually exceed the number of notices that CATS
- 5 accepted?
- 6 A. That is the case for some of the months, yes.
- 7 Q. Isn't it the case for all of the months there shown in
- 8 | 2013, sir?
- 9 A. No, it's not.
- 10 Q. No, it's not? Is there one that you see where the deleted
- 11 notices are smaller than the accepted notices?
- Oh, you're right. May 2013, there were about 10,000
- more accepted than deleted. And the other months, the deleted
- 14 exceeded the accepted, correct?
- 15 A. Yes. That matches what I'm seeing.
- 16 Q. Now, I've done the math here, and I counted the number of
- 17 deleted notices in the years shown in this chart, and it's
- 18 | about 5 million. And is there any reason to doubt my math?
- 19 A. I would have to run the numbers myself to speak to that.
- 20 Q. Okay. And then I did the same for the claims period.
- 21 And if we could pull up the first slide of the
- 22 demonstrative?
- 23 What this slide shows, sir, is the claim period,
- 24 February 2013 through November 2014, for the information we
- 25 just looked at, including the accepted notices, the deleted

- 1 notices, and the total notices.
- 2 Do you see that the total number of notices was about
- 3 | 5.7, 5.8 million that Cox received in this time period?
- 4 A. Based on the document, yes.
- 5 Q. Assuming the math is correct.
- 6 A. That's right.
- 7 Q. And do you see that the number that Cox accepted was just
- 8 over 2 million, and that comes to about 36 percent of that
- 9 total?
- 10 A. I see.
- 11 Q. And do you see, Mr. Beck, that the number that Cox deleted
- 12 | is about 3.68 million, which comes to about 63 percent of the
- 13 | notices?
- 14 A. I see that.
- 15 Q. So according to this sworn information that Cox provided,
- 16 | Cox deleted over 63 percent of the infringement notices it
- 17 received in 2013 and 2014, correct?
- 18 A. Based on the numbers we're looking at.
- 19 Q. And not one of those would have received a customer facing
- 20 action of any kind, correct?
- 21 A. For the deleted notices. They may have received notices
- 22 from non-blacklisted senders, however.
- 23 Q. Of those 3.68 million, not a single customer faced any
- 24 action, correct?
- 25 A. For those particular notices.

1429 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. VOLUME 7 (A.M. Portion) TRIAL TRANSCRIPT December 10, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 ICOMS that he's shown in this column?
- 2 You found it? All right, let's pull it up. We found
- 3 | it.
- I got it. Beautiful, thank you. It takes a village.
- 5 So on this third one, on the business customer, sir,
- 6 this was a fraternity based on the information that Cox
- 7 provided, so let's see what the fraternity did.
- 8 A. If we found the -- a copy, do you mind if I get the paper?
- 9 Q. Oh, yes. Absolutely, sir. And this is PX 549.
- 10 A. I appreciate it.
- 11 Q. So similar in kind, we've counted the number of tickets
- 12 for this fraternity business customer, and it was 67 tickets,
- 13 and you could figure that out by counting the unique number of
- 14 | ticket IDs, correct?
- 15 A. That can be determined by counting the ticket IDs, yes.
- 16 Q. Okay. So let's go to column H and filter again. Let's
- 17 filter for warnings.
- So out of 67 infringement notice tickets, if you look
- 19 on the bottom left, sir, you see that it's 48 warnings to the
- 20 customer?
- 21 A. Yes, I see.
- 22 Q. Okay. And then if we filter for hard limits, that would
- 23 | be instances where notice or tickets rejected for being over a
- 24 complainant's cap, with no customer-facing notice, correct?
- 25 A. Yes, subject to possibly hold for more. Yes.

- 1 0. Nine hard limit replies with no customer-facing action,
- 2 | correct?
- 3 A. That's what I see.
- 4 Q. And -- okay. If you could clear that and go back to
- 5 column H, and let's look for suspensions or terminations.
- 6 We don't see any suspensions or terminations of the
- 7 | fraternity, right?
- 8 A. No.
- 9 Q. And likewise, we don't see any terminations for the
- 10 | fraternity?
- 11 A. No, we do not.
- 12 Q. Okay. And if we could go, unfilter again, and look the
- 13 | tickets range from March 2012, correct?
- 14 A. Starting in March 2012.
- 15 Q. All the way through November 2014, correct?
- 16 A. Yes.
- 17 Q. And we don't know what happened after that. We don't know
- 18 | what happened in 2015 because we don't have the data, right?
- 19 A. Correct. Yes, this report was scoped 2012, 2013, 2014.
- 20 Q. And so for any tickets received but they received no
- 21 | warning and no hard limit reply, do you know what happened to
- 22 those? I think the count would be about 19.
- 23 A. Do we have a way to filter for those?
- 24 Q. We don't -- I mean, we could filter for -- on H for --
- 25 | well, changed status to closed would be overinclusive.

1581 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. -----: VOLUME 7 (P.M. Portion) TRIAL TRANSCRIPT December 10, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 | with a Bates number Cox Sony 511291 dated June 5, 2014.
- 2 Do you see that either individually or as a recipient
- 3 | from an e-mail distribution group you are a recipient or sender
- 4 of this e-mail?
- 5 A. Yes.
- 6 Q. And once again, Mr. Mathews begins an e-mail chain subject
- 7 | titled: Termination Review.
- 8 Do you see that?
- 9 A. Yes.
- 10 Q. And Mr. Mathews says: This customer is well aware of his
- 11 actions and is upset that after years of doing this he is now
- 12 | getting caught. Customer was advised to stop sharing, check
- 13 his wireless, and remove his P2P programs.
- 14 Did I read that correctly?
- 15 A. Yes.
- 16 Q. Can you read your response.
- 17 A. Please advise this customer that this is their final
- 18 | suspension and reactivation. If we receive one more complaint,
- 19 | we will regretfully not be able to provide them with data
- 20 service for six months.
- 21 Q. Isn't this the poster child for termination, Mr. Sikes?
- 22 A. Yes. And if they continued after this point, they would
- 23 be terminated, yes.
- 24 Q. So given that termination review on the 13th infringement
- 25 | notice, it's still not enough?

Q. Okay.

- 2 A. So these were not the final numbers.
- 3 Q. Okay. And if you could turn to page 4 of this same
- 4 exhibit, please. This is a slide labeled Executive Summary.
- 5 There is a sub-bullet that says: P2P is the most bandwidth
- 6 intensive category.
- 7 Then it says: (13 percent of all broadband
- 8 households) on average use 82 gigabytes a month, accounting for
- 9 21 percent of all Internet traffic.
- 10 Do you see that sub-bullet?
- 11 A. Yes.
- 12 Q. Could you explain what that means?
- 13 A. Yeah. This means for the U.S., and a lot of our analysis
- was done for profiling the United States user base and then
- 15 applying it to Cox.
- So this would mean that 13 percent of all broadband
- 17 households across the country engaged in P2P. And those that
- do, use an average of 82 gigabytes per household per month for
- 19 peer-to-peer.
- 20 And that total then extrapolated out accounts for
- 21 21 percent of all Internet traffic.
- 22 Q. So at the time of this Mid-Term Readout, this was 2012,
- 23 | correct?
- 24 A. Yes.
- 25 Q. And here you're indicating that Cox has five different

- 1 tiers of high-speed Internet service; is that correct?
- 2 Ultimate, Premier, Preferred, Essential, and Starter?
- 3 A. Yes.
- 4 Q. And is the idea that each of those tiers has a different
- 5 monthly data allowance?
- 6 A. Yes.
- 7 Q. And the idea is that the more data a customer consumes,
- 8 | the higher the tier they need to move into unless they stop --
- 9 stop the usage, correct?
- 10 A. Yes.
- 11 Q. What online activities besides streaming or downloading a
- 12 | video account for higher bandwidth usage than peer-to-peer?
- 13 A. Okay, just give me a second.
- Okay. So if you refer to page 18 in the same
- document, in terms of the overall, you'll see video streaming
- 16 of two different flavors, SD and HD, absorb more bandwidth.
- 17 So then on this slide, it would show that
- 18 peer-to-peer is third. But what it doesn't show is the other,
- 19 | which contains many other services.
- 20 So those detailed breakdowns are not there.
- 21 Q. Okay. So after video streaming, peer-to-peer represents
- 22 | the category that consumes the most bandwidth usage by
- 23 | subscribers that engage in that activity, correct?
- 24 A. Yeah. I would have to look at what's in Other, right?
- 25 Because Other is 17 percent. So what I don't know is whether

- 1 peer-to-peer usage was forecasted to increase year over year?
- 2 A. Yes.
- 3 Q. And if you could turn to the High Household Profile
- 4 section of this excerpt.
- 5 Do you see that?
- 6 A. Yes.
- 7 Q. Does this reflect that inCode forecasted to Cox that for
- 8 those that engage in peer-to-peer activity, that their overall
- 9 data consumption for peer-to-peer would increase in each of the
- 10 | years for 2011 to 2015?
- 11 A. Yes.
- 12 Q. In 2011 the Procera data showed that 12-and-a-half percent
- of the data of Cox's network was being used for peer-to-peer
- 14 | file -- file usage, correct?
- 15 A. Yes.
- 16 EXAMINATION
- 17 BY MS. LEIDEN:
- 18 Q. Could you first turn to the document that Mr. Zebrak
- 19 marked earlier as Exhibit 94. That's the hard copy of the
- 20 | spreadsheet that you were looking at electronically.
- 21 A. Okay.
- 22 Q. Just a couple of clarifying questions on this data. If
- 23 | you flip to the second tab after the first blue page, the page
- 24 | titled Summary of Data Usage.
- 25 A. Yes.

1713 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. -----: VOLUME 8 (A.M. Portion) TRIAL TRANSCRIPT December 11, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 A. Yeah. I mean, one of the more recent or latest -- I
- 2 | forget the precise date of it, reviews of the literature, but
- 3 | it was -- I believe it was after the 2014, said that they found
- 4 26 studies of whether or not there was economic harm to rights
- 5 holders, and they found that something like 23 out of those --
- 6 out of the 26 studies found significant economic harm.
- Now, when you say "significant," what you mean is
- 8 | that you're actually able to demonstrate it within the dataset
- 9 using statistical methods to basically sort of pass muster.
- 09:50:52 10
- So it's not like I found evidence, but it's not
 - 11 statistically significant. So it doesn't mean that's
 - meaningless, it just means that, you know, it doesn't cross
 - 13 that higher bar that academics try and set for themselves in
 - 14 published literature.
 - So when they say 23 out of 26 studies found
 - 16 | significant harm, that's -- you know, I would say, you know, a
 - demonstration of almost universal consensus in the profession.
 - 18 Q. And did you agree with that consensus?
 - 19 A. Absolutely. And I think all the other evidence I
- 09:51:25 20 | considered in this matter just goes to confirming that.
 - 21 Q. Have you prepared a slide excerpting one of the studies
 - 22 you reviewed?
 - 23 A. Yes.
 - 24 Q. Could you tell us about this study and why you've put this
 - 25 | slide here, Dr. Lehr?

A. Yeah. This is one of the studies that I cited, and the title of the study is Quantifying Global Transfers of Copyrighted Content Using BitTorrent.

And it's by Alexandria Mateus and John Peha. And I've highlighted, you know, excerpts from this. So the first excerpt is that 10.7 songs were transferred using BitTorrent for every song sold.

And then also, that the vast majority of music and video content transferred using BitTorrent is copyrighted.

And they find that only .55 percent, less than, you know, 1 percent, about half a percent of the content in BitTorrent is not copyright infringing and potentially legitimate.

So they conclude that BitTorrent transfers result in hundreds of millions of copyright violations worldwide per day, and the copyright holders fail to realize significant revenues as a result.

What these guys did in the study was they looked in some detail and care at actually what's going on in BitTorrent traffic. And, you know, it's a fairly comprehensive study, I think, in doing that.

And what they're saying here is essentially this research says that the number of illegal copies that are out there -- because almost all these copies that are going by BitTorrent are illegal, that's what this is saying, is that

09:52:48 20

09:52:12 10

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1749
            it's copyrighted material that are being shared over the
        1
        2
            BitTorrent network -- it's ten times what the legal sales are.
        3
                 Now, Dr. Lehr, there is a document in front of you,
            PX 439.
        4
        5
            Α.
                Yes.
        6
            Q.
                Do you recognize that?
            Α.
                 Yes.
        8
                      MR. GOULD: I'd move to admit PX 439.
        9
                      THE COURT: Any objection?
                      MR. BUCHANAN: Yes, Your Honor, I would -- no
09:53:32 10
       11
            objection.
       12
                      THE COURT: All right. Your exception is noted
       13
            previously.
       14
                      MR. GOULD: If we could pull up--
       15
                      THE COURT: The exhibit is received.
                      MR. GOULD: Actually, you know what, I have got a
       16
       17
            slide, so it's fine.
       18
            BY MR. GOULD: (Continuing)
       19
                 Dr. Lehr, what is PX 439?
09:53:47 20
                 This is another one of the, you know, documents that I
       21
            reviewed in reaching my opinions. It was, you know, a study
       22
            that looked at -- it was another study also looking at some of
       23
            the same issues that were touched on in the paper I just saw,
       24
            looking at what's actually in BitTorrent traffic.
       25
                      And so, what they did was they only identified out of
```

the torrent files, out of 12,500 torrents analyzed, there were only two files that they offered -- or two torrents that -- files that offered non-infringing content. So that results in them including that 99.97 percent of content was infringing.

So this is another example of research of the sort that was relied upon by analysts and academics trying to think about this question of does, you know, peer-to-peer file sharing result in piracy that harms rights holders?

And, you know, it goes to the point of, you know, people that actually looked at this, documents what was, I would say, commonly known by people that were thinking about these issues at the time that, you know, of course, the traffic, peer-to-peer traffic is almost all illegal copyright.

- Q. So how does this -- how do these two articles and the body of literature tie in with your opinion that this peer-to-peer infringement causes economic harm?
- A. Well, what the peer-to-peer does is it basically makes it extremely easy. So it is kind of like piracy on steroids.

 While piracy did happen and has been a problem forever -- you know, when people did discs, you know, did copyright CDs, that just wasn't quite the same thing.

But if someone can put on the Internet a copy via broadband connection, especially via a high-speed broadband connection a copy, the number of times that can be shared is potentially unlimited.

09:55:35 20

09:54:52 10

- 1 to do that, nor does it actually exist.
- 2 Q. So there are three points on your slide here. Can you
- 3 | just walk through and just briefly explain why this data
- 4 doesn't exist.
- 5 A. Sure. So the first issue, problem, if you try to estimate
- 6 | the revenues -- so I'm trying to figure out how much lower
- 7 | revenues were as a consequence of the piracy. That's what I
- 8 | would have needed to have done if I was going to try and
- 9 estimate what the economic harm to plaintiffs would be.

09:58:10 10 It was clear to me, after looking at the evidence and

- 11 | what was available in the literature, that evidence did not
- 12 exist. So I didn't attempt to do that.
- But if you -- the first thing you would have to do is
- 14 estimate that Q, how many unit sales would they have sold in a
- world without piracy. So to do that, the first thing you have
- 16 to do is figure out how many illegal copies are out there as a
- 17 | consequence of the piracy.
- So in this case, the data we have is evidence of
- 19 | infringement using peer-to-peer by subscribers repeatedly, you
- 09:58:42 20 | know, engaging in infringing activity. We don't observe how
 - 21 many actual copies were distributed by those subscribers, nor
 - 22 | could we given the way the data was actually collected. So
 - 23 that at best we have a lower bound estimate of the amount of
 - 24 infringing activity.
 - So MarkMonitor, which is the principal source of the

- 1 data, wasn't surveying every Cox subscriber all the time. And
- 2 | the -- so they wouldn't have known everything that was going
- 3 on.
- 4 And a file, even potentially more important, a file
- 5 | that is distributed illegally, once it gets out there virally,
- 6 how many illegal copies that copy can spawn. You would --
- 7 | there is no way to precisely estimate that.
- 8 So that's the Q. You don't know what the Q is. And
- 9 the data in the case doesn't allow you to reliably estimate
- 09:59:43 10 that, the number of illegal copies.
 - Now, that number of illegal copies isn't -- doesn't
 - 12 equate directly to the number of sales that would have
 - 13 happened.
 - 14 Q. Why not?
 - 15 A. Because the second thing you have to know is you have to
 - 16 | know how many of those illegal copies would have -- had they
 - 17 | not existed, would have translated into legal sales.
 - Now, if you say the legal sales would have taken
 - 19 | place at a zero price, then it's okay. But if you say it's a
- 10:00:11 20 | non-zero price, some of the things that went out there
 - 21 | illegally might not have been bought.
 - So you have to figure out what was the purchasing
 - 23 | behavior of the subscribers, what they would have done if they
 - 24 hadn't been able to get the pirated copies. And that data
 - doesn't exist. We don't have detailed data on Cox's

- Can you -- what information did you consider in
- 2 forming this opinion?
- 3 A. So I actually -- in this case I actually got, it was
- 4 closed, a subsample of Cox's data about the levels of
- 5 infringement. So excerpts from their CATS system that
- 6 documented the -- you know, matched the tickets to subscriber
- 7 accounts from 2012 to 2014.
- 8 So I know what -- how many tickets and when those
- 9 tickets arrived for those subscribers in that data.
- I also received for that subsample of subscribers
 - 11 from Cox's billing system all of the bills that were billed and
 - 12 paid by Cox subscribers identified in the CATS data, that
 - 13 subsample we got, from 2012 to 2016.
 - So I have like month by month this is how much they
 - 15 paid for the services they got. So I had that data and I
 - 16 matched that up.
 - 17 And when you match that data up -- there were a few
 - 18 | missing records, you know, in terms of things, but basically
 - 19 there were 57,279 subscribers that were identified as
- 10:27:05 20 | infringing. In other words, they had received at least one
 - 21 ticket, for which I had billing data.
 - 22 Q. And for those 57,000-odd subscribers, what did you
 - 23 determine Cox billed those customers?
 - 24 A. Well, then having matched those datasets up, you can go
 - 25 through and you can sum the revenue over whatever period you

- 1 | want. And the period that I summed it over for this table was
- 2 from February 2013 to December 2016. And that number for all
- 3 | those subscribers in that -- those 57,279, it is \$307 million
- 4 that were billed.
- 5 Q. Now, this time frame that you've identified here, why did
- 6 | you use that time frame?
- 7 A. I used that time frame because I think it's -- one, it's
- 8 | the claim period in this case and it's illustrative of this. I
- 9 | could have used a different time period. I mean, I could have
- 10:28:02 10 | shown even more, the numbers would be bigger.
 - 11 And I didn't -- I wouldn't -- I didn't -- I stopped
 - 12 at 2016 because that's all the data I had. I believe a number
 - 13 of these subscribers were still subscribers and were still
 - 14 producing revenue. So that would drive the number up if I had
 - 15 been given data up to the present.
 - 16 And presumably also, since the ticket data ends at
 - 17 | 2014, a number of those subscribers received additional tickets
 - and it's possible that additional, you know, subscribers would
 - 19 have been provided.
- 10:28:32 20 So this number here is what the data is. I am
 - 21 showing you what's in the data and give you an idea of what
 - 22 | it's telling you.
 - 23 | O. I'll turn to 3+ and 5+ in a moment. But I want to
 - 24 understand what do the amounts that Cox billed and collected
 - 25 from these customers tell you about Cox's incentives or

- 1 benefits in respect to infringement or infringing customers?
- 2 A. Well, there is various standards one might have to
- 3 determine, you know, what's infringing. But this is evidence
- 4 | that I believe -- I think the evidence in this case
- 5 demonstrates credibly that Cox knew they had a significant
- 6 number of infringing subscribers on their network.
- 7 And we will talk about other things. Like for
- 8 example, they knew they had a lot of peer-to-peer traffic on
- 9 their network. And they also knew that peer-to-peer traffic is
- 10:29:29 10 | almost all infringing traffic.
 - But this is data from their own billing system of
 - 12 subscribers that were identified to them by the RIAA in the
 - 13 | messages sent to them as these are subscribers engaging in
 - 14 infringement. And Cox continued to bill these subscribers even
 - 15 though they were infringing, deriving a direct financial
 - 16 benefit from these subscribers that is in the hundreds of
 - 17 millions of dollars.
 - 18 Q. Why have you included in your slide here, Dr. Lehr, an
 - 19 entry showing direct infringers with just one ticket? How does
- 10:30:08 20 | that demonstrate Cox's economic incentives versus a direct
 - 21 infringer who had just one ticket in Cox's system?
 - 22 A. Well, first off, I think to understand what's going on
 - 23 here, you ought to have some sense of the dataset. So the
 - 24 dataset begins with infringers that have one or more tickets.
 - 25 | So I think that's the first reason you absolutely want to show

it.

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But the other is because you're trying to get a handle on evidence that shows that Cox actually benefitted, that its incentives -- what the theory tells you comports with what the evidence actually shows and is demonstrated by Cox's actual behavior.

So the theory tells you that a business operates to generate profits and do the right things. And so, it's in Cox's incentive to retain profitable subscribers.

Cox, indeed, retained profitable subscribers. And it chose to retain and earn significant revenues and profits from subscribers that were identified as infringing.

Now, you know, whether or not these -- you should say, oh, you know, those subscribers that only got one ticket weren't really infringing, I'm not arguing with that. Although the data suggests that the fact that they got one ticket, given what I said earlier and given what we know about the nature of the sampling of the data, means that there is maybe a bunch of people that never got a ticket that were infringing merrily. They got one ticket and they infringed a lot more, but didn't get subsequent tickets. And we don't know how many infringements are associated with the subscriber that got identified.

So I'm not trying to tell you how to map to a number of infringements. That's not my testimony here. It's about

10:33:05 20

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what is their economic incentive to knowingly tolerate having infringing subscribers on their network.

And I believe the \$307 million gives you an idea that they had a very large economic and financial incentive from that.

- Q. Now, when Cox would have considered the value of these direct infringing subscribers in the context of this economic incentive opinion, would Cox have considered just some of the value of that customer, or more of the value of that customer, or the entire value of that customer?
- A. Cox is in a continuous business of trying to get customers, trying to hold on to the customers it has. And that's especially valuable because it costs money to acquire customers. And if you already have them, it is much more profitable to keep them. And so Cox was continuously doing that. And so, as I said, the economic basic data shows that.

This data shows that in fact they were capturing significant revenue from infringing subscribers. And the fact that I catch you at some certain point in your career doesn't mean you weren't infringing before. I don't have ticket data about what -- some of these subscribers that may have been subscribers before 2012. I only have data of these subscribers and the tickets they received between 2012 and 2014. That's a sliding window. And I don't have the revenue from before.

So, these subscribers and the benefit to Cox is

- 1 greater than the evidence that I have here.
- 2 Q. Now, looking again at the time frame. If you had limited
- 3 | this to just the claim period, February 2013 to November 2014,
- 4 | would that impact your opinion?
- 5 A. Well, it wouldn't impact my opinion that Cox had a very
- 6 | significant economic benefit. It would change the numbers
- 7 because, for example, it would make the billing charges that
- 8 are reported here go down.
- 9 And just one other point here. These numbers are the
- 10:33:58 10 | billing charges. The evidence shows and the testimony by Cox
 - 11 is that the actual revenues received by Cox were almost
 - 12 | 99 percent of what was billed.
 - So it's not like this is what was billed, but maybe a
 - 14 | bunch of these people didn't pay their bills. No, most of
 - 15 these people did pay their bills. And so, the difference
 - 16 | between what was actually received and the billing charges,
 - 17 | it's very close.
 - 18 Q. Okay. So I just want to make sure we understand. What
 - 19 does the 3+ and 5+ show?
- 10:34:36 20 A. So, again, my purpose with this is to sort of give you
 - 21 | some sense of what is going on in the data and what we see.
 - So if you say, take that dataset and then only look
 - 23 at the total billings associated with the subset of subscribers
 - 24 that had three or more DMCA tickets, the 57,279 subscribers
 - 25 goes down to 31,514 subscribers. And then the billed charges

- 1 | also goes down to 208 million.
- 2 And then if you ask the question about, okay, well,
- 3 what about 5+ DMCA subscribers, that number goes down to 20,189
- 4 | subscribers, and their total billed charges were \$164 million.
- 5 | So, you know, still a very large number.
- 6 Q. And so, the 5+ is direct infringers who received -- are
- 7 | there 20,000 direct infringers with 5+ tickets?
- 8 A. Identified in the subsample of total infringements by the
- 9 RIAA that is already, you know, by all reasonable estimates
- 10:35:45 10 expected to be a subsample of the total amount of infringing
 - 11 activity and infringing subscribers that exist on Cox's
 - 12 network.
 - 13 Q. You talked earlier, sir, about the bundling of products.
 - 14 How does that factor into this analysis?
 - Can you tell the jury what kinds of services the
 - 16 customers represent in this slide, subscribed to and paid for.
 - 17 A. Well, this, again, is looking at all the services those
 - 18 | subscribers paid for. So it's not just looking at, you know,
 - 19 what revenue did they get from these subscribers associated
- 10:36:16 20 | with their high-speed Internet service. Because that's not how
 - 21 the service is sold.
 - Customers buy a bundled service. When you buy a
 - 23 | bundled service, you get a different price. In fact, you get a
 - 24 discount. And consumers want to buy bundled services because
 - 25 | it gives them one point of contact, because it's simpler, they

- 1 each of the different subscribers. And there are some that
- 2 billed lower amounts and some that billed higher amounts. And,
- 3 you know, this is a subscriber that billed a fair amount.
- 4 It turns out that this amount is not that different
- 5 than sort of what you might think the average value of
- 6 | subscriber would be over their lifetime. You know, it's order
- 7 | of magnitude. It's okay, it's a little bit more valuable. So
- 8 this is -- you know, this also would go to a thing of like,
- 9 geez, a 101 ticket subscriber also billed \$8,594 in the
- 10:44:25 10 | subsample of the data that I'm showing.
 - 11 You know, that shows this is an infringing subscriber
 - 12 | that Cox is deriving a direct financial benefit from. And they
 - were close to 60,000 subscribers that have a different number
 - 14 like this.
 - But, you know, you look at them and I showed other
 - 16 | ways to think about that with the --
 - 17 | Q. But this is a residential. Did you consider a couple of
 - 18 business customers to demonstrate?
 - 19 A. Yeah, the business -- yes, I did, and the next one is the
- 10:44:48 20 | business subscriber. The business subscribers were, as I said,
 - 21 | a smaller number, but they account for a lot more dollars per
 - 22 account typically. And this one was one of the observations
 - 23 that had one of the highest numbers of tickets in the whole
 - 24 dataset to give you an idea.
 - So this one got eventually 4,074 tickets. And they

1786 1 At this point a recess is taken; at the 2 conclusion of which the case continues in the absence of the 3 jury as follow: 4 JURY OUT 5 THE COURT: All right. Joe, let's get our jury, 6 please. NOTE: At this point the jury returns to the 8 courtroom; whereupon the case continues as follows: 9 JURY IN THE COURT: All right. Please be seated. 11:09:45 10 11 Mr. Gould, continue, sir. 12 MR. GOULD: Thank you, Your Honor. 13 BY MR. GOULD: (Continuing) 14 Dr. Lehr, did you reach any conclusions about the relative 15 value and benefit to Cox of retaining repeat infringing 16 subscribers? 17 Yes, I did. There's -- I considered several types of 18 evidence to -- regarding this matter. 19 And could you walk us through the basis for this opinion. 11:10:11 20 Yeah. First off, when Cox sells its broadband service, it 21 doesn't have just a single, you know, broadband service. It 22 offers different tiers. You know, like a -- you know, a low 23 tier service that's less expensive, provides a lower data rate 24 and tells the customers that, you know, their data allowance is going to be less. And that's suitable for people that are 25

1 going to be really light broadband users.

And then it has higher tiers. And the higher the tier, the higher the price for the service, the more you get.

So it's like a lot of things. So it is sort of if you want to get a fully-loaded car, you pay more for the extras. You want to have broadband that runs really fast and has a big data cap, supports multiple users in your household, these sorts of things, you get a higher tier service. So --

Q. You talked about data, but you also just mentioned speed.

What does this -- how does the speed impact the tiers?

11 A. Well, they --

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12 Q. Or relate to the tiers.

A. They -- when they define the nature of the service, they also tell you what its likely performance is going to be, you know, so what -- they'll say a data rate up to this certain speed, and sort of what's the average data rate you could expect.

And so, for certain activities, for example, downloading files, having something like BitTorrent work and having a usable experience, you need -- the faster your service is, the faster the files will download, the better the experience you'll have if, for example, you're using it to infringe, which is what it's principally used for, and the better the experience other subscribers in the BitTorrent, you know, world will have when they pull the file from you, you

Case 1:18-cv-00950-LO-JFA Document 699-2 Filed 02/28/20 Page 112 of 149 PageID# 1788 1 know. 2 So if you try to basically, you know, download a file 3 and the connection is too small, it's like trying to drive on 4 the highway in a Model T Ford, you know. It's not going to be 5 a pleasant experience. 6 You know, whereas if you have a very fast speed 7 service, you'll download files quickly, you can download more 8 of them. And you'll also, you know, have -- it won't interfere 9 with other things that you're doing. Now, on this notion of -- the second and third point: 11:12:23 10 P2P 11 consumes more bandwidth and was a key driver of Cox's 12 bandwidth. 13 Did you prepare a slide showing some of the 14 information you considered? 15 Yeah, I did. I mean, what's important to understand is that it -- you know, the broad -- the companies that provide 16 17 broadband service have to manage their network and provision 18 their network for the peak traffic loads. And they also want 19 to look at sort of what people are doing and what -- you know, 11:12:55 20 what kind of services they have so they can give those customers the experience those customers, you know, want and 21 22 expect.

And so, they look at the different types of traffic.

And if you have someone that all they're doing is e-mail
occasionally, they're not moving a lot of data and they're

23

24

1 not -- they don't need a very fast high speed service.

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subscribers do.

If someone's doing something like peer-to-peer,
that's one of the most intensive -- bandwidth intensive
services, both on the upload and the download, that broadband

And this slide is -- you know, pieces out of a consultancy report that was prepared by this company, inCode that, you know, provided advice to Cox on sort of, you know, what they should be expecting in the future, what traffic looked like in the Internet, what traffic looked like, and what other, you know, broadband providers around the country were doing.

And what this one says is basically what I've been saying. Is that peer-to-peer is the most bandwidth intensive category. And this one shows that, you know, peer-to-peer households were 13 percent of all broadband households. Which is a much higher number, for example, than the 60,000 subscribers that have been identified here relative to the 4.5 million broadband subscribers that Cox had.

So 60,000 over 4.5 million is well less than 13 percent. Which would suggest and is consistent with the inference I make that we were only observing a subset of the actual infringement that was happening on the network.

 $$\operatorname{But}$ this is -- this one is showing that this is a heavy use thing.

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Now, the lower chart is showing the forecast that these consultants prepared for sort of the typical household's monthly usage. And so, there are three lines here. There's a yellow line, a red line, and a green line. And in its models for coming up with these forecasts, it characterizes what these firms -- you know, what these types of households do.

So the yellow lines are households that are doing -you know, using the Internet relatively lightly. And their
bandwidth demand is relatively low. And they're candidates for
this Starter or Essential tier, the lower priced services, you
know, these lower dark blue bands that run across.

But if you're in the red band, you need to be in the Preferred tier.

And if you're a green type of customer, you need to be the Premiere band or the Ultimate tier because your utilization doesn't fit with the experience you have.

Now, the users of peer-to-peer are most likely to be in this green band or the red band, but certainly not in this yellow band.

So just understanding the character of what peer-to-peer is and what people are doing, and understanding that peer-to-peer is almost all infringing activity, Cox is, you know, listening to and knows -- this is evidence that Cox internally knew that the customers that were doing peer-to-peer were more likely to be customers and candidates for its more

- 1 expensive broadband services.
- 2 So that's a piece of evidence. That's some of the
- 3 evidence that goes with the general understanding of how the
- 4 business operates.
- 5 Q. And how does this tie in, Dr. Lehr, to your opinion that
- 6 Cox had an economic incentive to tolerate infringement?
- 7 A. Well, these customers that are providing and are in the
- 8 higher tier services are more profitable than the lower tier
- 9 services because almost all the costs of providing the service
- 11:16:28 10 to the customers is fixed, it doesn't really depend upon the
 - 11 actual use of the customers.
 - So, for example, when customers are heavy users, they
 - 13 | may not be heavy users during the peak period, which is when
 - 14 they size the network.
 - 15 It's like you figure out how big a pipe do I need
 - 16 during my busiest hour to make sure that the customers that I
 - 17 promised service to get the service they expect. But if
 - 18 | customers use that pipe when it's not particularly busy, then
 - 19 that doesn't cost me anything because I have the pipe there
- 11:17:00 20 anyways.
 - 21 Q. Now, did you have any access to Cox data that reported the
 - 22 actual tier, the actual tier that the direct infringing
 - 23 subscribers in this case subscribed to?
 - 24 A. No, I don't, because the ICOMS billing data just says what
 - 25 | they were billed, but it doesn't tell me what tier those

- 1 | customers were in. And so, I didn't have that data, but I do
- 2 have the ICOMS data and the ticket data. So there are things I
- 3 | can infer from that.
- 4 Q. So just remind us, sir, what's the ICOMS data?
- 5 A. The ICOMS data is the internal billing system. So they
- 6 keep this for all their subscribers. But, you know, the subset
- 7 of the data we got was for those subscribers who had been
- 8 | identified as infringing subscribers in the CATS data with one
- 9 or more DMCA tickets. And then we had their revenue payments
- 11:17:55 10 from 2012 to 2016.
 - 11 Q. And were you able to look, sir, at the Cox billing data
 - 12 for the direct infringers in this case and draw conclusions
 - 13 | about their relative value?
 - 14 A. Yeah. So one of the things you can do is you can say,
 - 15 let's look at the data payments. So not all the revenues they
 - 16 | billed, but the data payments which shows up in two different
 - 17 elements within the dataset for each customer. And you can
 - 18 say, what was the average of only those subscribers, the
 - 19 average billing per month for only those subscribers that
- 11:18:32 20 | received one to two tickets? And we can -- can we compare it
 - 21 to subscribers that received more tickets.
 - 22 And so, for example, can we compare it to subscribers
 - 23 | who got 20 or more tickets? So if you got 20 or more tickets,
 - 24 the evidence is showing you are, by the evidence, assuming the
 - 25 evidence straightly maps directly to your infringing behavior,

- 1 | that you're a heavier infringer.
- 2 When you do that comparison and you apply statistical
- 3 tests, you find that there is a statistically significant
- 4 increase in the data billed and revenues paid by the more heavy
- 5 infringers.
- 6 So this is data from a limited subsample of Cox's own
- 7 internal billing of these infringing subscribers that have been
- 8 | identified as infringing that statistically shows that there is
- 9 a large, 8 percent increase in the data billings to those
- 11:19:30 10 | subscribers.
 - And that, you know, goes as consistent with the other
 - 12 | stuff, stuff their internal documents and what you would
 - 13 otherwise infer.
 - 14 Q. What do you mean by statistically significant?
 - 15 A. You apply statistical tests and say, given the size of the
 - 16 | sample I have and the variability in that sample, is this a
 - 17 difference that looks as if it could be explained as just
 - 18 random, or does it look like it's actually, you know,
 - 19 | statistically significant.
- 11:19:56 20 Q. And it looks like -- the 8.4 percent increase, what
 - 21 charges does that relate to?
 - 22 A. That's just the charges associated with their payment for
 - 23 data services.
 - 24 Q. And it looks like it's about a six-and-a-half or so dollar
 - 25 incriminate. \$6 doesn't seem like that big of a difference.

- 1 Why does that matter here?
- 2 A. Well, first off, you know, as an economist and someone who
- 3 | cares about looking at the data, it is statistically
- 4 | significant. So that matters. 8 percent is a big difference.
- 5 That is more an trivial amount.
- And six bucks does make a difference. It makes a
- 7 difference to individual subscribers. I would certainly care
- 8 | if my bill was \$6 more or less for this.
- 9 And if you have 60,000 subscribers that there might
- 11:20:45 10 be this kind of difference or incentive, or, you know, some
 - 11 number of subscribers -- you remember, Cox is dealing in
 - 12 subscriber numbers that are in the millions, hundreds of
 - 13 thousands, tens of thousands. You multiple that, that's a big
 - 14 number. That's a big additional incentive.
 - 15 It's not like the subscriber that charges 43 bucks or
 - 16 | even 30 bucks a month in data services isn't profitable for Cox
 - 17 | and Cox doesn't want to retain that subscriber. It's just that
 - 18 | they really want to retain these subscribers that are more
 - 19 valuable. And if they're higher infringing, it looks like
- 11:21:19 20 they're valuable.
 - 21 Q. How does that tie into your opinion that Cox benefited
 - 22 from retaining these direct infringers?
 - 23 A. Well, it speaks to the economic incentive that Cox had to
 - 24 retain, you know, repeat infringers on its network even when it
 - 25 knew, you know, that it had -- these were repeat infringers,

- 1 | and that it's incentives were greater when these repeat
- 2 | infringers -- there is evidence suggesting that they were even
- 3 heavier infringers.
- 4 Q. I want to move to the next part of this opinion.
- 5 You said that Cox saved by not addressing
- 6 infringement. What do you by that, sir?
- 7 A. Well, I talked a little bit about that in my opening
- 8 statement. So had Cox addressed the infringement more
- 9 aggressively, you know, they would have probably had to deal
- 11:22:10 10 | with more customer service calls. They would have had to mail
 - 11 more notices and had more interactions to deal with
 - 12 subscribers. They would have incurred direct costs associated
 - 13 with the response.
 - 14 They probably couldn't have gotten away with reducing
 - 15 | the personnel of the department that was dealing with the abuse
 - 16 | stuff, as they actually -- as I understand they actually did.
 - 17 But, you know, so they would have incurred additional
 - 18 costs.
 - 19 Q. Were able to quantify the costs saved by Cox by not
- 11:22:44 20 addressing the infringement?
 - 21 A. I wasn't able to quantify these because, first off, I'm
 - 22 | not offering an opinion here about what more and specifically
 - 23 | Cox should have done. And what Cox specifically might have
 - 24 done would affect what the incremental costs would have been.
 - But certainly they should have done more than they

1797 1 subscribers were terminated. 2 Of those, 597,796 were residential subscribers, and 3 21,915 were business subscribers. 4 So like any business, if you're selling to someone a 5 repeat service and they stop paying their bills, the reasonable 6 thing to do is stop selling them service. And Cox does that. 7 Cox has to do that on a fairly regular basis because not everybody pays their bills. This is on the order of 25,000 a 8 9 month, is sort of what their terminations are. And they were able to do that level of terminations 11:25:10 10 11 and still come up with the profit and loss accounting data that 12 I looked at. 13 So terminating customers, you know, at some number, you know, that's below 25,000 a month, is probably not going to 14 15 move their costs much because they've accounted for that. 16 It's also worth comparing that to what they actually 17 did for copyright infringement. So over that period, they only terminated 32 customer accounts. 32 of them were residential, 18 0 were business. 19 11:25:47 20 And of those 32, I believe the ones that are 21 associated with the 60,000 notices, roughly 60,000 notices that 22 are associated with the RIAA, was 13. So 13 of something like 23 57,000, that's all the terminations they did for copyright. 24 So this is additional evidence that I believe 25 supports the contention that Cox is more than willing to make

30647 1866 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. VOLUME 8 (P.M. Portion) TRIAL TRANSCRIPT December 11, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 | size it is, Cox's service is more appealing for those
- 2 subscribers, is it not, if Cox gives, gives that subscriber
- 3 warning after warning, without terminating their service?
- 4 A. I don't have any substantiation for that.
- 5 Q. Well, you used the term "friction" in your direct
- 6 testimony. Do you recall that?
- 7 | A. I do.
- 8 Q. Friction is something the customer doesn't want, correct?
- 9 A. That's correct. That's correct.
- 10 Q. Something that interferes with them using the service how
- 11 they want it, when they want it, right?
- 12 A. Correct.
- 13 Q. In the way they want it, right?
- 14 A. That's correct.
- 15 Q. For instance, a suspension would be an example of
- 16 | friction, correct?
- 17 A. Perhaps. If a customer was suspended for not paying our
- 18 | bill, regardless of the level of friction it creates, we don't
- 19 | want to have a relationship with them. If a customer was
- 20 | suspended for doing something fraudulent or illegal, we
- 21 | wouldn't mind that friction because we wouldn't want to have a
- 22 relationship with them.
- 23 | O. So your testimony is that if Cox is aware that its
- 24 | customer has violated the rules for using its service, it
- doesn't want a customer relationship with them; correct?

- 1 A. That is correct.
- 2 Q. So there'd be no reason for Cox to be told again and again
- 3 and again and again of specific subscribers engaging in
- 4 infringement but retain them as a customer, would there?
- 5 A. I don't have details on that, but I can trust that that
- 6 | would be something we would not want to do.
- 7 Q. You want your customers to have a deep connection with the
- 8 Cox service, right?
- 9 A. That's right.
- 10 Q. And friction gets in the way of that, right?
- 11 A. Correct. It does.
- 12 Q. For example, if you're identified in notices as being an
- infringer and your service is suspended, that's an example of
- 14 | friction, right?
- 15 A. Well, if -- again, what we were just talking about, that
- 16 | may be an example of friction for the consumer that we're
- 17 | willing to take on because the consumer might be doing
- 18 | something illegal that we don't want to do business with them.
- 19 Q. You're aware, as we've been talking about, that Cox has a
- 20 | set of rules that govern its customers' use of its internet
- 21 service, right?
- 22 A. I am aware of that, yes.
- 23 Q. It's called an AUP?
- 24 A. Acceptable Usage (sic) Policy, yes.
- 25 Q. And one of the things it does is prohibit use of the

- 1 Q. Okay. Sir, I'm going to remind you of something you said
- 2 when I deposed you, which we've already established that you
- 3 tried to tell the truth and were under oath, right?
- 4 A. That's correct.
- 5 Q. Okay. So page 65 of your deposition, beginning at line 7:
- 6 | So is downloading of music one of the online activities that
- 7 Cox has advertised in terms of activities where speed can be
- 8 used?
- 9 So when downloading music was part of the consumer as
- 10 | a whole, their need to access internet, the internet, when that
- 11 | was important and popular, then that was a marketing message
- 12 | that became effective for us to use.
- 13 A. That's correct.
- 14 Q. Okay. So marketing your service to download music has
- 15 been effective for Cox, correct?
- 16 A. Has been effective at different points in time but is not
- 17 | currently an effective message that we use.
- 18 Q. So you're saying that today, Cox doesn't advertise
- 19 downloading music?
- 20 A. That's correct.
- 21 Q. So why don't we look at -- well, are you aware, sir, that
- 22 | Cox for many years has tried to sell its service by relating
- 23 | speed to downloading music in the form of a hundred songs in
- 24 three seconds?
- 25 A. That's correct. That is the visual imagery that we were

- 1 trying to connote when it came to music.
- 2 Q. Right. So you admit that for many years, including 2013
- 3 and '14, Cox has advertised speed in relation to downloading
- 4 music, correct?
- 5 A. I don't know if it was many years, but definitely during
- 6 | that time frame is correct.
- 7 Q. And that includes --
- 8 A. It was in association with our gig internet products, yes.
- 9 Q. And that includes downloading a hundred songs in three
- 10 seconds, right?
- 11 A. Correct.
- 12 Q. Right. And by doing the simply math, a hundred songs in
- 13 three seconds would be a thousand songs in thirty seconds,
- 14 | would it not?
- 15 A. That's correct.
- 16 Q. Okay. Sir, I'm going to show you a document that's
- 17 | already been admitted as evidence in this case as PX 1, and I'm
- 18 just going to actually just pull it up on the screen. It's not
- 19 | in the binder that you have in front of you.
- 20 And I'm going to ask Mr. Duval to scroll through
- 21 | that -- or actually, excuse me, Mr. Ruelas is helping me out,
- 22 making me look good.
- 23 Why don't you take a few seconds and look at what's
- 24 | behind tab 1. That's a list of the sound recordings that are
- 25 at issue in this case, and there's 6,734 of them. Take a look

30652 1998 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. VOLUME 9 (A.M. Portion) TRIAL TRANSCRIPT December 12, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 | that's -- I hope that answers your question.
- 2 Q. So why, why did Cox have a graduated response program?
- 3 What was the purpose of it?
- 4 A. I'll give you my opinion because I don't speak for Cox,
- 5 but my opinion was that Cox recognized that there was a real
- 6 issue and a real problem with, with copyright infringement, and
- 7 | that your clients, the recording industry, had some, some
- 8 proper concerns about it, and that our customers needed to
- 9 understand better why that was a problem and that -- and that
- 10 copying music, let's say, without paying for it was not the
- 11 right thing to do.
- 12 And so we, we wanted to -- I think Cox wanted to find
- 13 | a way to help your clients and our customers understand -- I'm
- 14 sorry -- your clients with this problem and our customers with
- 15 | some ignorance, understand what was the right thing to do,
- 16 and -- so they tried to design a system that would deal with
- 17 | that, would fix it.
- 18 Q. So you began your answer, Mr. Cadenhead, by saying your
- 19 opinion, but you don't speak for Cox. Just to be clear, I want
- 20 to know what you understood at the time you were at Cox was the
- 21 purpose of the graduated response program.
- 22 A. That's what I think it was.
- 23 | O. So you understood that the purpose was to address real
- 24 problems with copyright infringement that copyright owners
- 25 had --

- 1 Q. Why not?
- 2 A. Because you're, you're describing it as if Cox was doing
- 3 | something actively, and I, I don't remember that being the
- 4 case.
- 5 Q. What do you recall it being?
- 6 A. When Cox got a notice, it started its graduated response
- 7 process.
- 8 Q. And during that process, did Cox find a way to prevent the
- 9 subscriber from infringing?
- 10 A. The process was meant, as I understood it, to educate the
- 11 customer so that the customer would not do that.
- 12 Q. So as you oversaw the graduated response program, you
- 13 recognized that some of Cox's subscribers may be infringing
- 14 | copyrights intentionally, correct?
- 15 A. Well, I, I oversaw it from a legal standpoint, and I, I
- 16 | think the program -- the process recognized that some customers
- 17 | were infringing and almost certainly knew they were infringing
- 18 and needed to stop, and we tried to get them to stop.
- 19 Q. Was there a point in time when Cox instituted a policy --
- 20 a graduated response policy that had a specific number of steps
- 21 before a customer would be terminated?
- 22 A. Cox began with notifying the customer through several
- 23 | means and steps, which varied over time. Cox required that
- 24 | there be an actual communication between a knowledgeable
- 25 representative at Cox and the customer at least once and

30655 2329 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. VOLUME 10 (A.M. Portion) TRIAL TRANSCRIPT December 16, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 have considered is relevant, and it may -- you know, I mean,
- 2 he's answered -- I don't -- it doesn't change my opinion, but I
- 3 think it's in the wheelhouse. So I'm going to allow it.
- 4 MR. ELKIN: All right. Thank you, Your Honor.
- 5 THE COURT: All right. Thank you.
- 6 NOTE: The sidebar discussion is concluded; whereupon
- 7 | the case continues before the jury as follows:
- 8 BEFORE THE JURY
- 9 THE COURT: All right. You've heard some testimony
- 10 about, you know, getting back into graduated response and when
- 11 | Cox took -- may have taken certain actions. Those were
- 12 hypothetical questions and not assuming facts in evidence. So
- 13 just consider them as that, okay? Thank you.
- 14 All right. Please continue, Mr. Gould.
- 15 BY MR. GOULD:
- 16 Q. Sir, you also agree that if Cox had terminated this
- 17 | customer after three or five tickets, it wouldn't have billed
- 18 or received internet revenue from that customer during the
- 19 period of that termination, correct?
- 20 A. In that hypothetical, during whatever that period of
- 21 | termination would be, however that's defined, that would be
- 22 true by definition.
- 23 Q. And I want to take a look at one more of these charts,
- 24 | sir, a similar chart for a business customer that was a
- 25 | fraternity. You recall this slide and testimony about it?

- 1 | I don't think that's exactly right, but for purposes of moving
- 2 | things along, I'll accept it.
- 3 Q. You recall this slide, sir?
- 4 A. Yes.
- 5 Q. And when you talked about this slide, you talked about
- 6 that the infringing activity was a small amount of the user's
- 7 | activity or something along those lines, right?
- 8 A. I don't think I actually said that, but I did say that
- 9 context is important, yes.
- 10 Q. Well, I may have misheard because I didn't expect it, but
- 11 | I thought you did. You didn't do any measurement or analysis
- 12 or study to determine the amount of peer-to-peer activity
- 13 occurring on Cox's network, did you?
- 14 A. I know the subscribers, I know some information that I've
- 15 | read, but I haven't done, like, created an equation with that
- 16 in it.
- 17 Q. And you don't dispute or disagree that peer-to-peer is a
- 18 highly bandwidth-intensive activity, do you?
- 19 A. When it's done, it's bandwidth intensive. The question
- 20 | is, like, when it's done relative to everything else that's
- 21 happening --
- 22 Q. And you -- I'm sorry.
- 23 A. -- that might be -- might go to what you're asking.
- But when it's done, it takes a fair amount of data,
- 25 yes.

30658 2483 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. -----: VOLUME 10 (P.M. Portion) TRIAL TRANSCRIPT December 16, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 A. It does not.
- 2 Q. Does ICOMS contain information that would show whether a
- 3 | subscriber's internet service was limited to particular
- 4 categories of end users like employees, contractors, guests, or
- 5 | the like?
- 6 A. It does not.
- 7 Q. In addition to ICOMS, does Cox also have other databases
- 8 and systems?
- 9 A. We have very many, many databases and systems, yes.
- 14:31:36 10 Q. Mr. Jarchow, to what extent do you have knowledge of Cox's
 - 11 other databases and systems beyond ICOMS?
 - 12 A. My primary job responsibilities are related to ICOMS. I
 - 13 have one or two ancillary databases that I have access to.
 - 14 Q. And, sir, are you personally aware of any database or
 - 15 | system at Cox with information about whether a subscriber uses
 - 16 | its Cox internet service for public WiFi versus for a secure
 - 17 | computer network or for both?
 - 18 A. No, I do not.
 - 19 Q. Mr. Jarchow, in connection with this lawsuit, were you
- 14:32:09 20 asked to retrieve information about certain subscribers from
 - 21 | the ICOMS system?
 - 22 A. Yes.
 - 23 Q. And how do you identify the subscribers whose information
 - 24 you were asked to retrieve?
 - 25 A. A list of account numbers was provided by Brent Beck, and

- 1 Q. And Cox hasn't provided the names of the residential
- 2 customers, correct?
- 3 A. It has not.
- 4 Q. You understand that the business customers were given an
- 5 opportunity to object in court to the disclosure of their
- 6 names?
- 7 A. Yes.
- 8 Q. And you mentioned, I think, two that you said did?
- 9 A. Yes, sir.
- 14:39:52 10 MR. GOULD: Could you pull up DX 358, please?
 - 11 Please scroll to the top, please.
 - 12 BY MR. GOULD:
 - 13 Q. Mr. Jarchow, this is DX 358, which has the bulk of those
 - 14 | customers' names, correct?
 - 15 A. Yes, sir.
 - 16 Q. I think it was about 2,700 or so that were on this
 - 17 | particular spreadsheet, give or take.
 - 18 A. Yes.
 - 19 Q. Now, if we look at some of the names of the business
- 14:40:32 20 | customers, No. 5 is Olympia Skate Center, and right below that
 - 21 is a Computers & More, right? And you keep going down and you
 - 22 | can see there's a college, and one's a fire station.
 - 23 If you keep scrolling down, towards the bottom,
 - 24 Margaritas, let's see, line 21 says Margaritas Mexican Bar &
 - 25 Grill. And right below that is Cars R Us.

2511 1 Did I read those correctly? 2 That's what I'm reading, yes, sir. 3 MR. GOULD: If you could just click down another 4 page? 5 BY MR. GOULD: Let's take a look at some of the other names. There's a 6 couple of Starbucks, right? 8 Yes. Α. And there's an art gallery, correct, at line 49? Α. Yes. 14:41:27 10 11 O. Let's take a look at another page, okay? Line 79, there's 12 something called Crystal Chandelier, right? And then an 13 infirmary and a diner and a coffee shop, and then at 87, you 14 see Sal's Seafood and Chicken. 15 Did I read those correctly? 16 Yes, sir. And 86, Staybridge Suites. 17 Let's take a look at another page. At line 103, you have Q. 18 5 Minute Oil Change Shop. Below that is a barbershop, and then 19 at 106, there's a Pipes R Us Plumbing, correct? 14:42:09 20 Α. Yes, sir. 21 Okay. Let's take a look at another page. At the top, 22 you've got a nail and spa, right? 23 Yes, sir. Α. 24 And at 117, there's a restaurant and oyster bar?

And 116, Benchmark Communications.

25

Α.

- 1 Q. Yeah. And at 122, we have Cairo Cafe?
- 2 A. That's correct.
- 3 Q. There's a TGI Fridays right at the bottom?
- 4 A. Yes.
- 5 Q. Let's just look at one more page to get a sense here. At
- 6 | 155, you have Smooth Movers, correct?
- 7 A. That's correct.
- 8 Q. And 166, something called Underground Audio? Did I read
- 9 | that correctly?
- 14:43:01 10 A. That's correct.
 - 11 Q. And these are fairly representative of the types of
 - 12 customers and names that are listed in these three exhibits,
 - 13 | correct?
 - 14 A. In general, yes.
 - 15 Q. And there's also a handful of hospitals, doctor's offices
 - 16 | or medical centers, right?
 - 17 A. Doctors' offices, medical centers, library, government
 - 18 facilities, yeah.
 - 19 Q. Saw a couple of volunteer fire stations, correct? Sound
- 14:43:34 20 | familiar? You've looked at these?
 - 21 A. Yes.
 - 22 Q. You understand, sir, that Cox has argued in this case that
 - 23 | it can't be expected to terminate Internet service of business
 - 24 customers for copyright violations if those customers are
 - 25 hospitals, police, fire, or other critical infrastructure?

- 1 MS. GOLINVEAUX: Objection, Your Honor. Scope.
- 2 MR. GOULD: Your Honor, this witness is listed on our
- 3 | exhibit list as well.
- 4 THE COURT: Yeah, I'm going to allow the question.
- 5 Your exception is noted. Thank you.
- 6 BY MR. GOULD:
- 7 Q. Sir, do you understand that Cox has argued in this case
- 8 | that it can't be expected to terminate internet service for
- 9 business customers for copyright violations if those customers
- 14:44:14 10 | may include critical infrastructure or health care services?
 - 11 A. I understand.
 - 12 Q. And I think you testified that the ICOMS database from
 - 13 which this information came doesn't actually tell Cox what the
 - 14 customer uses that service for, correct?
 - 15 A. That is correct.
 - 16 Q. It could include a field here that says it's used for
 - 17 WiFi, right?
 - 18 A. Managed WiFi. If we sold them managed WiFi service.
 - 19 Q. You could include a field that says this customer used our
- 14:44:43 20 | service for WiFi, correct?
 - 21 A. If we sold them managed WiFi service.
 - 22 Q. But there's no way to distinguish based on the billing
 - 23 | records or the ICOMS database whether those WiFi users were
 - 24 using some secured private network or a public WiFi network,
 - 25 correct?

- 1 | refreshes your recollection. If you look at the first sentence
- 2 of paragraph 2, does this refresh your recollection that your
- 3 | current job duties focus on the technical support of the
- 4 business systems that Cox Communications uses to provide its
- 5 services?
- 6 A. The first sentence, but the second sentence, the primary
- 7 | system I'm responsible for is ICOMS customer subscriber
- 8 management system, yes.
- 9 Q. Sir, you recall submitting a sworn declaration in this
- 14:47:26 10 | case in which you testified that your current job duties focus
 - on the technical support of the business systems that Cox
 - 12 | Communications uses to provide its services?
 - 13 A. Yes.
 - 14 Q. And do you agree with that?
 - 15 A. With the primary system, I'm responsible for it, being
 - 16 | ICOMS, yes.
 - 17 Q. So I'm just asking you about the first sentence in your
 - 18 | sworn declaration. Your job duties focus on the technical
 - 19 | support of the business systems that Cox Communications uses to
- 14:47:54 20 provide its services. Is that your job duties or not?
 - 21 A. Yes, sir.
 - 22 Q. So we already talked about ICOMS, but given those job
 - 23 | duties, I think what you're saying is beyond ICOMS, you're also
 - 24 | not aware of any other databases at Cox that contain
 - 25 information about whether a Cox Business customer at issue here

- 1 used their internet service to provide emergency services,
- 2 | correct?
- 3 A. I don't manage any other systems at Cox. I communicate
- 4 | with leaders that do manage those other systems, yes.
- 5 Q. You just don't know?
- 6 A. I don't know.
- 7 Q. And the same is true of whether any of these customers
- 8 provide critical infrastructure services through Cox's internet
- 9 services, correct?
- 14:48:41 10 A. That's not subject to my --
 - 11 Q. I think you testified that you have reviewed an objection
 - 12 | to disclosure of the customer's name from a hospital to whom
 - 13 Cox provides internet service, correct?
 - 14 A. I have reviewed that.
 - 15 Q. And I wasn't sure I understood what you said. I want to
 - 16 | make sure I got it correctly. I think you said that the
 - 17 hospital reported that its internal secured network for
 - 18 employees and health services was operated by someone different
 - 19 than Cox, correct?
- 14:49:14 20 A. That is what was filed.
 - 21 Q. And the hospital said that -- the only thing that the
 - 22 | hospital said in its statement was that it purchased internet
 - 23 | access that it used for public WiFi from Cox, correct?
 - 24 A. That was what was in the filing, yes.
 - MR. GOULD: I have no further questions.

30666 2686 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, -vs-: Case No. 1:18-cv-950 COX COMMUNICATIONS, INC., et al.,: Defendants. VOLUME 11 (A.M. Portion) TRIAL TRANSCRIPT December 17, 2019 Before: Liam O'Grady, USDC Judge And a Jury

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2713
 1
     That's the question, was the analysis done at the time of his
 2
     report, and the answer is no.
 3
               THE COURT: All right. All right. The motion to
 4
     preclude the exhibits which contain the lower portions of 13
 5
     and 21, 22, 23, 26, and the last two, the motion is granted.
     Those will be amended -- or not presented. I find that the --
 6
 7
     in going over the reports, and in particular, the pages that
 8
     defendants have pointed to, that the analysis was not done.
 9
     There has been no notice that Mr. Tregillis was going to
10
     testify about those matters.
11
               This is clearly outside of the report, the summaries
12
     that he gave of what his testimony was going to be, and
13
     although they're not, as Mr. Buchanan pointed out, the most
14
     resounding modifications, they are modifications, and they do
15
     change the dynamics of his report, and that's -- it's
     impermissible to do that this late in the -- on the last day of
16
17
     trial. So the motion is granted to just -- those will be --
18
     exhibits will either be redacted or they won't be used.
19
               All right. What else do we have this morning?
20
               MR. OPPENHEIM: I don't think anything else at the
21
     moment, Your Honor.
22
               THE COURT: Okay. All right. What -- does that --
23
     who is -- Tregillis is the next witness? Is that --
24
               MR. ELKIN: No, Your Honor. We're calling
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Mr. Mencher.

- 1 0. And we talked about -- you talked a little bit about the
- 2 different tiers of service. Do you recall that, the internet
- 3 | tiers of service?
- 4 A. Yes.
- 5 Q. And generally, the higher the bandwidth and the higher the
- 6 | speed, the higher the price for that service, correct?
- 7 A. Yes.
- 8 Q. And the different prices that Cox charges its tiers of
- 9 | internet service factor into Cox's profitability?
- 10 A. Yes.
- 11 Q. And the payments received from customers that Cox retains
- 12 | factors into Cox's profitability?
- 13 A. Yes. The payments we receive and the payments we don't
- 14 | receive, for that matter, both factor into profitability.
- 15 O. Does Cox collect more revenue from a customer that it
- 16 | terminates for copyright infringement or that it retains on its
- 17 | network?
- 18 A. I'm not familiar with what we terminate or don't terminate
- 19 | for a copyright infringement. What I can say is customers that
- 20 | we have, we get revenue from, and customers that we don't have,
- 21 | we don't get revenue from.
- 22 Q. And that would include customers terminated for copyright
- 23 | infringement, correct?
- 24 A. Again, I don't know whether we are terminating or what's
- 25 the process for terminating customers for copyright

- 1 | infringement, so it's difficult for me to answer that question
- 2 directly.
- 3 Q. Are you saying you're not aware of whether Cox terminates
- 4 customers for copyright infringement violations?
- 5 A. I'm not aware -- I don't -- I'm not familiar with the
- 6 details of the process through which customers get terminated,
- 7 | so it's, it's difficult for me to say.
- 8 Q. You're the vice president of finance and accounting. Are
- 9 you aware, yes or no, whether Cox terminates customers for
- 10 | copyright infringement violations?
- 11 A. I believe we do.
- 12 Q. And if a customer is terminated for a copyright violation,
- 13 does Cox collect more revenue from that customer or a customer
- 14 | that it keeps on its network?
- 15 A. Any customer that is terminated, we will no longer collect
- 16 | revenue from.
- 17 Q. You talked about Cox not charging data overage fees. Did
- 18 I get that right?
- 19 A. Yes.
- 20 Q. You're talking about a particular time frame, though,
- 21 | aren't you?
- 22 A. I am.
- 23 Q. Because starting in 2015, Cox actually began charging data
- 24 overage fees, correct?
- 25 A. I don't remember the exact date, but we do collect overage

- 1 0. That's what you said, right?
- 2 A. No. I think the data are available to instruct on that.
- 3 And they tell us that that viral idea you're talking about
- 4 isn't happening. But I appreciate the concept.
- 5 Q. Well, sir, that -- what you just mentioned wasn't part of
- 6 your analysis in this case, was it?
- 7 A. Yes, it was.
- 8 Q. Sir, a few moments ago I asked you whether you agreed with
- 9 Dr. Lehr that actual damages -- that we can't calculate them
- 10 | because the universe of distributions is unknown. And you
- 11 | agreed with me, correct?
- 12 And that's a yes or no.
- MR. BUCHANAN: I don't think that was the question,
- 14 about actual damages, Your Honor.
- THE COURT: He's --
- 16 MR. ZEBRAK: Let me move on, Your Honor.
- 17 THE COURT: He can't determine -- yeah, reask the
- 18 question.
- 19 MR. ZEBRAK: Yeah.
- 20 BY MR. ZEBRAK: (Continuing)
- 21 Q. Nobody knows how many distributions occurred here,
- 22 correct?
- 23 A. I agree with you on that.
- 24 Q. Right. And it was for that reason that Dr. Lehr was
- 25 looking at Cox's economic incentives, rather than just doing

30671 2837 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division SONY MUSIC ENTERTAINMENT, et al.,: Plaintiffs, : Case No. 1:18-cv-950 -vs-COX COMMUNICATIONS, INC., et al.,: Defendants. VOLUME 11 (P.M. Portion) TRIAL TRANSCRIPT December 17, 2019 Before: Liam O'Grady, USDC Judge And a Jury

- 1 | correct?
- 2 A. Right. The revenue share that would go to the
- 3 plaintiffs, a dollar.
- 4 Q. Okay. So before lunch, we already talked about what you
- 5 used for the quantity. I'd like to now talk about the royalty
- 6 rate that you applied. Okay?
- 7 A. Okay. Great.
- 8 Q. Now, you used a dollar per notice, right?
- 9 A. Right.
- 10 Q. Okay. And you used the dollar because that was your
- 11 | calculation, sort of the average cost of a single-track
- 12 download from iTunes, correct?
- 13 A. Not exactly. A single-track download from iTunes is
- 14 | somewhere between \$0.79 and \$1.29. In production, you and
- 15 your clients provided information that told me how much of
- 16 that you get, and for sound recordings, you get up to about
- 17 | \$0.90, and for musical compositions, you get \$0.10. So I used
- 18 | all of that, assuming you get all of the musical compositions
- 19 | and all sound recordings, even though those -- that's not
- 20 | actually the case, but that's where those come from, is your
- 21 disclosures.
- 22 Q. All right. The activity for which that rate applied was
- 23 | the single-track download for digital download from iTunes,
- 24 correct?
- 25 A. It's based on the \$0.79 up to a \$1.29 for a single-track

- 1 download, that's right.
- 2 Q. Right. And you looked to the single-track download rate
- 3 because you understood that these tracks were available for
- 4 purchase on an individual basis on iTunes, correct?
- 5 A. Right.
- 6 Q. Now, in choosing a royalty rate, it's true, is it not,
- 7 | sir, that it's important that the royalty rate fit the
- 8 economic realities of the situation that you're applying it
- 9 toward, correct?
- 10 A. Yes.
- 11 Q. And the single-track download rate when someone buys a
- 12 track from iTunes, that's the rate for obtaining the track for
- 13 personal use, correct?
- 14 A. Yes.
- 15 Q. That price is not the price for authorization to
- 16 distribute it to countless people through a peer-to-peer
- 17 | network, correct?
- 18 A. That's right. It's for an individual to purchase and use
- 19 | that track. That's my understanding of it.
- 20 Q. Right. And it's also your understanding, sir, that
- 21 plaintiffs have never granted a license for anyone to
- 22 distribute their music all across peer-to-peer networks on an
- 23 unlimited basis, correct?
- 24 A. That's right.
- 25 Q. The cost of that would be enormous, correct?

- 1 apparently let most of the businesses just skate in terms of
- 2 | these notices, and so they were much more lenient in my
- 3 | observation with their business customers.
- 4 Q. Not necessarily with respect to copyright infringement
- 5 per se, but in running your various businesses, did you have
- 6 occasion to work with business customers on compliance issues?
- 7 A. In, in my European operations, probably 70 percent of my
- 8 business was business customers; and, you know, spanning
- 9 | multiple countries in multiple legal environments, I had
- 10 probably as many lawyers as, as employees at this point
- 11 because every country had a different set of laws; and
- 12 | compliance -- being compliant with the law is a very critical
- 13 factor.
- 14 So with the business customers, we typically entered
- 15 into contracts. There were the AUP-type things that went in
- 16 | there that says: This is an acceptable use.
- 17 And each country had its own little changes in
- 18 | acceptable use; and we managed to successfully navigate those
- 19 | waters by having good contracts, good acceptable use policies.
- 20 We basically maintained our ability to verify that they were
- 21 being followed, and that went fairly well.
- 22 Q. Dr. McGarty, you were here when Dr. Almeroth testified
- 23 for Cox, correct?
- 24 A. Yes, sir.
- 25 Q. I'm not saying his words precisely, but do you recall

I expected that there would be testimony about how many of these sound recordings were also music compositions, and the jury would be -- would have that evidence through the witness stand when they were deliberating.

I mean, it's a close issue even to begin with as to whether in this day and age, when the courts have clearly been looking at the independent value of the works versus whether they're music compositions and sound recordings, and I'm not sure that Mr. Oppenheim isn't correct that we shouldn't even be looking at the traditional Second Circuit analysis that you've cited and is one of the governing cases, but I just don't see that there's evidence from which they could collect and cull and determine whether they wanted to combine the statutory damages award for those works that are — contained both sound recordings and music compositions.

So I'm going to find that they should be allowed to deliberate on the 10,017 individual works, regardless of whether they're compositions or sound recordings, and your exception, of course, is noted.

The other issue on mitigation, you know, I didn't know how that would go in the course of the trial, but, you know, clearly we had the instruction that I gave in <u>BMG</u>
talking about the -- that the mitigation instruction included both that plaintiffs had failed to use reasonable efforts to mitigate damages and also that the amount by which damages